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# The Mining Journal

## RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1937.—VOL. XLII.

LONDON, SATURDAY, OCTOBER 5, 1872.

[WITH SUPPLEMENT.] {PRICE FIVEPENCE. PER ANNUM, BY POST, £1 4s.

**MR. JAMES CROFTS, STOCK AND SHARE BROKER,**  
No. 1, FINCH LANE, CORNHILL  
(ESTABLISHED 1842).  
HOLDERS of Mining Shares DIFFICULT OF SALE in the open market may find purchasers for same through Mr. CROFTS' agency.  
**SPECIAL RECOMMENDATION.**—BELOWDA BRACON (Tin) shares, fully paid. A good discovery has been made at the mine. Business as BUYER or SELLER. CASTLE AN DINAS (Tin).—Special business in these shares, which should be bought for an early rise. The property is paying good dividends, which the agent states will soon be doubled. The mine never looked better. Mr. CROFTS can offer a few shares at £2 5s. each net, and recommends early application.  
Every description of shares bought and sold at NET prices.  
Daily Price List on application.  
Bankers: The City Bank.

**MR. W. H. BUMPUS, STOCK AND SHARE DEALER,**  
44, THREADNEEDLE STREET, LONDON, E.C., has FOR SALE the following SHARES, free of commission:—  
70 Frontino, 12s. 25 Rica (fully pd.), 22s 6d  
30 Australian Unit, 24s. 15 Flagstaff, £15½. 50 Rookhope, £3½.  
30 Birdseye Creek, £3. 10 Gawton. 25 Richmond Con., £6½.  
30 Bog, 30s. 15 Great Vor, £5½. 15 So. Condurrow, £2½.  
30 Castle an Dinas, £2½. 50 Gt. No. Laxey, 16s. 9d. 100 South Aurora Gravel, 14s. 6d.  
30 Cedar Creek (fully paid), £4. 20 Hingston. 50 South Aurora, £15½.  
75 Cwm Eilan. 30 Herodfoot, £19. 25 Sweetland Crk., £3½.  
100 Chontales, 12s. 6d. 30 Mossdale. 2 So. Wh. Frances, £6.  
15 Camp Floyd, £12½. 15 Marke Valley, £4½. 10 Tankerville, £15½.  
3 Cook's Kitchen, £32. 60 New Hingston, 18s. 20 Unit. Mexican, £2½.  
3 Devon Great Consols. 25 Pacific, £3½. 25 Van Consols, £5½.  
2 Dolcoath. 50 Pennerley, £2½. 20 West Wh. Lucy, 13s.  
50 Don Pedro, 15s. 100 Plynlimmon, 22s. 100 West Caradon, 4s.  
150 Eclipse, 3s. 9d. 100 Prince of Wales, 12s. 100 Wheel Agar, 43s. 9d.  
10 Emma (Silver), £24½. 30 Parys Mount, £2 1s 3. 20 W. Tankerville, £3½.  
25 Eberhardt, £2½. 80 Perkins Beach, 20s. 50 West Maria, 19s. 6d.  
15 East Caradon, £2½. 3 Providence. 50 Wh. Grenville, £9½.  
5 East Lovell, £17. 60 Penstruthal. 35 Wh. Grenville, £9½.  
W. H. B. transacts business in every description of shares at the best market prices, and free of commission.  
Bankers: National Provincial Bank of England, E.C.

**MR. YOUNG HUSBAND CHRISTIAN, STOCK AND SHARE DEALER,**  
11, ROYAL EXCHANGE, E.C.

**MR. WILLIAM SEWARD, STOCK AND MINING SHARE BROKER,**  
19, THROGMORTON STREET, LONDON, E.C.  
Every description of shares BOUGHT and SOLD at the best market prices.

**MR. T. A. MUNDY, STOCK AND SHARE BROKER,**  
38, BISHOPSGATE STREET WITHIN, E.C.  
Bankers: City Bank.

**MR. W. TREGELLAS, 122, BISHOPSGATE STREET WITHIN, E.C.,**  
Deals in all descriptions of Stocks and Shares at close market prices.

**MESSRS. GREGORY, WHITAKER, AND CO., STOCK AND SHARE DEALERS, AND GENERAL FINANCIERS,**  
81, BISHOPSGATE STREET, LONDON.  
Business transacted in all Marketable Securities at closest prices.

**MR. JOHN LEAN, 5, AUSTINFRIARS, E.C.,**  
DEALER in MINING and all other kinds of STOCKS and SHARES.

**JOHN B. REYNOLDS, STOCK AND SHARE DEALER,**  
70 and 71, BISHOPSGATE STREET WITHIN, LONDON, E.C., is able to obtain reliable information concerning British and Foreign Mines. The long experience he has had is at the service of the public.  
And invites instructions concerning mines not dealt in on the London market, providing always that the undertakings are bona fide.  
Established Fifteen Years.—Bankers: City Bank.

**MR. E. J. BARTLETT, STOCK AND SHARE DEALER,**  
No. 30, GREAT ST. HELEN'S, E.C., LONDON, transacts business at net prices in every description of security.  
Parties wishing to Transact Business in the following are requested to communicate:—  
DENBIGHSHIRE CONSOLS. PARYS MOUNTAIN.  
EAST SETON. SOUTH MERLYN.  
FRANK MILLS. THORNHILL REEF.  
GREAT ROCK. WEST GOLLDFILN.  
GORSIEDD & CELYN LEVEL. WILLOUGHBY.  
NORTH POOL.  
\* \* \* \* \*  
The discoveries that will be made in all probability during the next two months must cause a great demand for these cheap shares. Great expectations as to the engine-shaft.  
DENBIGHSHIRE CONSOLIDATED MINES (Limited).—The engine has started, and there is every reason to expect a most profitable investment. Shares are decidedly very cheap.  
SOUTH MERLYN.—An advance has taken place, but a further increase may be relied on—prices likely to be £3.  
Post free, seven stamps.

**HOW TO INVEST.—THE CAPITALISTS GUIDE.**  
A concise reflex on Foreign Government Securities, British Railways, and Mining Shares, with the interest they yield upon present prices.  
Published by E. J. BARTLETT, 30, Great St. Helen's, London, E.C.

**MESSRS. W. MARLBOROUGH AND CO.,**  
20, BISHOPSGATE STREET WITHIN, LONDON, E.C. (Established 18 years), have FOR SALE the following SHARES at prices annexed:—  
30 Aberdaunt, 10s. 25 East Van, £8 12s. 25 Pennerley, £2 12s.  
30 Almaden, 21s. 20 Exmouth, 40s. 6d. 20 Parys Mountain.  
30 Australian Unit, 24s. 9d. 50 Excoisior. 40 Plynlimmon.  
30 Birdseye Creek, £3. 10 East Lovell, £17½. 20 Rookhope.  
30 Bog, 30s. 20 East Grenville, 36s. 6d. 50 Rose United.  
30 Boscawell Downs. 5 Flagstaff, £15½. 10 Richmond, £2 14s. 6d.  
30 Bampfylde, off wid. 10 South Caradon, £210. 5 Great No. Laxey, £210.  
30 Birdseye Cr., £2 17s. 6d. 50 Frontino, 12s. 3d. 10 So. Condurrow, £5 18s. 9d.  
30 Cathedral. 50 Fortescue. 100 So. Tolcarne, 12s. 6d.  
1 Carn Brea, £16½. 75 Gold Run, 15s. 6d. 10 South Aurora, 26s. 3d.  
30 Carn Camborne, 22s. 25 Gt. Retallack, £3½. 15 Sweetland, £3½.  
30 Cook's Kitch., £31½. 20 Gorsiedd, £3. 10 Tankerville, £15½.  
30 Chontales, 10s. 3d. 15 Gawton. 25 Tollma.  
30 Camp Floyd, £12 16s. 3d. 10 Great Laxey, £13½. 2 Tincroft, £59½.  
30 Cwm Eilan. 5 Herodfoot, £19½. 10 Trumpet Wood, £14½.  
30 Cedar Creek, £2½. 25 Hobbs Hill. 50 Unity Wood, 21s.  
30 Castle an Dinas. 10 Hingston, £8 13s. 9d. 3 Van, £39½.  
30 Cape Copper, £19½. 15 Last Chance, £5. 5 Wt. Chiverton, £8 17s. 6d.  
30 Devon Consols, 26s. 20 Lovell. 20 West Tankerville, £3½.  
30 Don Pedro, 15s. 10 Marke Valley, £4½. 20 Wheel Grenville, £24.  
30 Denbighshire. 60 New Hingston, 16s. 3d. 20 Wheel Whisper.  
30 Emma, £24 9s. 6d. 20 New Dolcoath, £3½. 5 Wh. Kitty (St. Agnes), £14½.  
30 Eberhardt, £2 3s. 6d. 25 New Rosewater, £2½. 5 Wh. Kitty (St. Agnes), £14½.  
30 Eclipse, 3s. 15 North Pool, £2½. 10 Penhalms.  
30 E. Llanygrog. 15 New Pembroke, £5 1s. 3. 45 Richmond, £2½.  
East Wheel Lovell is in only 1904 shares, which should be immediately secured at present price. See agent's report.

**MR. GEORGE BUDGE, STOCK AND SHARE DEALER,**  
No. 4, ROYAL EXCHANGE BUILDINGS, LONDON, E.C. (Established 22 years), is a SELLER at net prices of:—  
25 Gawton, £25½. 130 Cwm Eilan (fully paid), 10s. 3d. 100 Penstruthal; 5 Minera;  
30 Prince of Wales, 11s. 100 New Crow Hill, 7s. 6d.; 35 West Tankerville, £3 9s. 9d.;  
65 West Jewell; 40 Parys Mountain, £2; 20 New Rosewater; 20 West Polbrean;  
£2 19s. 9d.; 35 Blue Hills; 2 Tincroft, £82; 100 Plynlimmon, 21s.; 10 East Caradon, £3; 100 Dolcoath; 15 Cathedral; 50 Old Treburgetts, 16s. 6d.;  
25 Great North Laxey, 14s. 6d.; 60 Penryn Vyrvan; 10 Boscawell Downs; 35 Bwlch Consols, 24s.; 125 Gobbett; 20 New Pembroke, £5½; 80 Excoisior, 12s.; 100 Gwydyr Park, 11s.; 2 Wheel Seton, £24½; 5 East Lovell, £16½; 20 Bog, £23½; 75 East Chiverton, 12s. 6d.; 25 West Gwynn Consols; 1 South Caradon; 20 Penhalms;  
3 Providence, 25½; 10 East Van, £8½; 60 North Pool; 35 South Kitty, 41s.;  
70 The Hill; 80 West Pant-y-Gro, 9s.; 10 Roman Gravel, £16½; 5 So. Frances;  
5 Van, £40; 40 All-y-Crib; 10 Treleigh Wood; 50 West Caradon, 3s.; 60 Perkins Beach, 22s.; 1 Dolcoath, £15; 135 Gold Run, 15s. 6d.; 25 Cedar Creek (fully paid) £4; 40 Birdseye Creek; 100 Anglo-Australian, 14s.; 200 Rossa Grande; 30 New Quebrada; 100 Yudanumutana, 17s. 6d.; 100 Frontino and Bolivia; 300 Anglo-Brazilian; 20 Utah, £2 16s. 9d.  
SPECIAL BUSINESS in Emma, Frontino and Bolivia, Gold Run, Minera, Blue Hills, St. Agnes Consols, Van Consols, and Harle Valley.

**WEEKLY MINING CIRCULAR, EVERY FRIDAY.**  
LONDON DAILY RECORD, STOCK & SHARE LIST, Every Evening.  
Published by P. WATSON, Stock and Share Dealer, 79, Old Broad-street, E.C.  
Bankers: The Alliance Bank, and Union Bank of London.

**MR. ALFRED E. COOKE**  
(Son and Successor to the late Mr. EDWARD COOKE),  
79, OLD BROAD STREET, LONDON, E.C.  
Dealer in Tankerville, West Tankerville, Roman Gravel, Pennerley, Van Consols, New Lovell, West Caradon, South Margaret, East Foxdale, Belowda Beacon, West Gwynn Consols, Emma, and nearly all British or Foreign Mines, Railways, and Foreign Stocks.  
A purchase of Rookhope Valley shares is strongly recommended.  
Bankers: Alliance Bank (Limited).

**MR. T. E. W. THOMAS, STOCK AND SHARE DEALER,**  
3, GREAT WINCHESTER STREET BUILDINGS, E.C.  
Established 1857.

**IMPORTANT TO SHAREHOLDERS IN ALL PUBLIC COMPANIES.**  
**WHAT TO SELECT—WHAT TO AVOID.**  
BY FREDK. WM. MANSELL,  
ENGLISH AND FOREIGN STOCK AND SHARE DEALER,  
PINNERS HALL, OLD BROAD STREET, LONDON, E.C.  
The OCTOBER number (now ready) contains a Comprehensive Review of the Position and Prospects of the General Investment and Mining Markets, &c., which should be read by all shareholders and others interested in such matters. It also contains many valuable hints to speculators.  
Gratis to clients. Subscription 1s. per copy, or 10s. 6d. per annum.  
Established 1857. Bankers: London Joint-Stock Bank.

**MR. C. A. POWELL, STOCK AND MINING SHARE DEALER,**  
No. 1, PINNERS COURT, OLD BROAD STREET, LONDON, E.C.  
References exchanged.—Bankers: City Bank, Finch-lane.

**MR. C. POWELL, STOCK AND SHARE DEALER,**  
78, OLD BROAD STREET, LONDON, E.C.

**MESSRS. HARLAND AND CO., STOCK AND SHARE DEALERS,**  
235 AND 236, GRESHAM HOUSE, LONDON, E.C.

**MR. J. GREGORY, STOCK AND SHARE DEALER,**  
CROSBY HALL CHAMBERS, BISHOPSGATE STREET, E.C.

**MR. HENRY MANSELL, STOCK AND SHARE DEALER,**  
14, GREAT WINCHESTER STREET, LONDON, E.C.  
Mr. H. M. advises an immediate purchase of ALL-Y-CRIB shares for a great rise in price.

**FERDINAND R. KIRK, STOCK AND SHARE DEALER,**  
4, BIRCHIN LANE, LOMBARD STREET.  
Special attention is invited to CASTLE AN DINAS. Shares are cheap, and certain to rise, dividends being regular.  
BELOWDA BEACON should also be bought. These are two superior investments. Shares difficult of sale can be registered. Daily Price-list free.

**MR. JAMES STOCKER, STOCK AND SHARE DEALER,**  
2, CROWN COURT, THREADNEEDLE STREET, has SPECIAL BUSINESS in the following:—

|                                |                             |                            |
|--------------------------------|-----------------------------|----------------------------|
| 30 All-y-Crib, 40s.            | 90 Gold Run, 15s.           | 30 Russia Copper, £5 16s   |
| 50 Bog, 30s. 6d.               | 100 Gen. Brazilian, 5s. 9d. | 20 Rosewell Hill, 21s.     |
| 40 Birdseye Creek, £2 13       | 25 Great Laxey, £13½.       | 25 Rookhope, £3 1s. 3d.    |
| 60 Bronfloy, 27s. 6d.          | 110 Gt. No. Laxey, 10s.     | 20 Sierra Butter, £3 18s   |
| 45 Boscawell Downs, £4.        | 20 Gawton, £3½.             | 30 South Aurora, 26s. 3d.  |
| 20 Cape Copper.                | 25 Hingston Down, £6 6s     | 90 Silverland, £3½.        |
| 40 Cedar Creek, £4½.           | 50 Kansas, £2½.             | 30 Sweet Plume, 30s.       |
| 25 Camp Floyd, £12½.           | 30 Last Chance, £5½.        | 20 So. Rom. Grav., 17s.    |
| 60 Chontales, 11s. 3d.         | 5 Lovell.                   | 15 So. Carn Brea, £3½.     |
| 3 Cook's Kitchen, £31          | 85 Mossdale.                | 20 So. Condurrow, £3½.     |
| 1 Carn Brea, £15s.             | 70 Malpas, 52s. 6d.         | 10 South Frances, £7.      |
| 50 Central Van, £2½.           | 20 Marke Valley, £4 13s     | 70 So. Great Work.         |
| 100 Cardigan Old Bog.          | 35 New Quebrada.            | 10 San Pedro.              |
| 45 Crenver & Abraham, 17s. 6d. | 15 New Pembroke, £5½.       | 100 Tolima, 62s. 6d.       |
| 50 Castle an Dinas, 44s.       | 20 N. Treleigh Wood, 41s    | 5 Treleigh Wood.           |
| 2 Devon Consols, £67.          | 10 N. Tankerville, 19s. 6d  | 25 Tankerville, £15½.      |
| 40 Don Pedro, 14s. 9d.         | 25 New Rosewater, £6½.      | 60 Tamar Valley, 9s. 6d.   |
| 10 East Caradon, £25½.         | 40 New North Van, 26s.      | 10 Van, £27½.              |
| 10 East Grenville, £1 16s      | 15 East Caradon, £210.      | 30 Van Consols, £5 1s. 3d. |
| 25 East Langynog.              | 65 New Dolcoath, £3½.       | 25 Wh. Grenville, £9½.     |
| 15 East Van, £8½.              | 80 New Hingston, 16s. 6d    | 5 Wheel Kitty, £14½.       |
| 85 Excoisior, 10s. 6d.         | 70 Port Phillip, 18s. 3d.   | 15 Wheel Lucy, £5½.        |
| 25 Exmouth, 41s.               | 10 Polbrean, £5½.           | 150 Wheel Russell, off wd  |
| 10 East Unity, 40s.            | 65 Plynlimmon, 21s.         | 5 West Frances, £17½.      |
| 20 Emma, £25½.                 | 115 Penstruthal, 32s.       | 170 West Caradon, 2s. 9d.  |
| 25 Eberhardt, £2 11s. 6d.      | 40 Perkins Beach, 14s. 6d.  | 10 West Basset, £7.        |
| 40 Eng. and Australian.        | 35 Pennerley, £2 11s. 6d.   | 85 W. Esclair Lie, £3.     |
| 110 Eclipse, 3s.               | 40 Parys Mountain, 36s 3    | 30 W. Maria, 18s. 9d.      |
| 50 Frontino, 11s. 3d.          | 50 Prince of Wales, 10s 3d  | 25 W. Tankerville, £3½.    |
| 30 Flagstaff, £15½.            | 10 Penhalms.                | 5 West Chiverton, £8½.     |
| 100 Georgia, 15s. pd., 13s 6   | 45 Richmond, £2½.           | 5 West Tolgus, £20½.       |
|                                | 90 Rica, 22s. 9d.           | 80 W. Gorland, £3 3s. 9d   |
|                                | 100 Rossa Grande, 5s. 6d.   |                            |

Bankers: London and Westminster.

**MESSRS. JAMES MAY AND SON,**  
9, GRACECHURCH STREET, LONDON, E.C.  
Referring to the advice given in previous announcements as to Van Consols and the Excoisior Mine, sustained as that has been by the very encouraging reports from the agents, as well as the activity in the market, proving the anxiety there exists to obtain shares, would again urge upon their friends and investors generally the desirability of an early purchase, at what we consider (although these shares are advancing every week) the present low quotation.  
J. M. and Son have also special business in the following most desirable properties:—Penstruthal Tin and Copper Mining Company and the Lovell Tin Mine.  
THE LANARNOX LEAD MINE, AND WEST GWENNAP CONSOLS.—Price and full particulars on application, as above.  
P.S.—Wanted, 500 or 1000 shares in Van Consols. Sellers will please state lowest price.

**MESSRS. W. DUNN AND CO., STOCK AND SHARE DEALERS,**  
3 AND 4, GREAT WINCHESTER STREET BUILDINGS, LONDON, E.C.  
Orders received and commissions received as usual.  
Bankers: National Provincial Bank of England.

**FOR SALE, at prices annexed, free of commission:—**  
20 Aberdaunt, £1. 5 Lovell. 20 So. Margaret, £1 2s. 6d.  
20 All-y-Crib, £2 1s. 50 New Hingston, 15s. 50 South Tolcarne.  
15 Boscawell Downs. 40 North Croft, £1. 5 Tankerville, £15.  
20 Cathedral. 20 Parys Mount, £2 10s. 3 Wheel Buller, £20.  
100 Cwm Eilan (20s. pd.) 10 Penhalms, £4 2s. 6d. 5 West Chiverton, £8s.  
10 6d. 25 Pennerley, £2 12s. 6d. 20 West Esclair Lie.  
5 East Lovell, £15s. 10 Roman Gravel, £16 15s. 5 West Frances, £15.  
30 Excoisior, 10s. 6d. 15 Rookhope Val., £2 15s. 5 West Jewell, £1 15s.  
50 Great No. Laxey, 10s. 25 Rose United. 30 Wh. Kitty (St. Agnes), £14 10s.  
10 General Sewage (£10 fully paid) £9. 2 St. Ives Consols. 4 Wh. Kitty (St. Agnes), £14 10s.  
10 Hingston Down, £6 10s. 10 So. Carn Brea, £3 5s. 5 Wh. Margaret, £12 15s.  
15 Lanarmon, £2. 10 So. Condurrow, £2 5s.

**MR. B. SMITHSON, 118, CITY ROAD, LONDON, E.C.,**  
offers the undermentioned SHARES FOR SALE at net price annexed:—  
10 Carn Brea, £100. 10 Castle an Dinas, £2. 20 Eberhardt, £2½.  
14 Dolcoath, £70. 15 East Caradon, £4½. 20 Gobbett, £1.  
10 East Basset, £27½. 20 East Lovell, £16.  
I advise all my clients and friends to secure an interest in Castle an Dinas Mine at the ridiculous low price. I fully expect at no distant period to see these shares quoted £10 to £15 each.

**BARTLETT AND CHAPMAN, STOCK AND SHARE DEALERS,**  
38, CORNHILL, LONDON, E.C.  
"Handy Book for Investors," 530 pages, cloth bound; second edition, revised and enlarged, and with a copious index, post free, 10s. 6d.  
"British Mines and Mining," 136 pages, cloth, 2s. 6d., post free.  
"Investment and Financial Record," post free on application.  
Bankers: London and Westminster.

**M. R. CHARLES THOMAS,**  
MINING AGENT,  
8, GREAT ST. HELEN'S, LONDON, E.C.

**MESSRS. A. W. THOMAS AND CO.,**  
10, COLEMAN STREET, E.C.  
MINING AGENTS, AND STOCK AND SHARE DEALERS.  
BOSCAWELL DOWNS.—This is fast becoming one of the largest tin-producing mines in Cornwall. The present returns are about 14 tons monthly, and upon the completion of the new stamps it is anticipated they will be increased to 35 tons. Messrs. A. W. T. and Co. have business in the shares, both as buyers and sellers, and are able to give full particulars of the property.  
Monthly Circular for October now ready: post free, 6d.

**MESSRS. G. LAVINGTON AND A. PENNINGTON,**  
44, THREADNEEDLE STREET, E.C., STOCK AND SHARE DEALERS, have BUSINESS in the undermentioned:—  
Birdseye. Mary Ann. Sweetland Creek.  
Eberhardt. West Wheel Gorland. Malpas.  
Eclipse. Pennerley. Bwlch.  
Kitty (St. Agnes). Pacific. Utah.  
Cedar Creek. Parys Mountain. West Esclair Lie.  
Parties wishing to purchase or sell in the foregoing are requested to make early application.—Special Business in Camp Floyd.  
LAVINGTON AND PENNINGTON, SWORN BROKERS.

**TO INVESTORS.—NOW READY.**  
**LAVINGTON AND PENNINGTON'S "MONTHLY RECORD OF INVESTMENTS,"** containing an exhaustive Review of the British and Foreign Stock and Share and Money Markets, &c., with an enumeration of safe investments, paying from 10 to 20 per cent. Price 6d. per copy, or 5s. annually.  
G. LAVINGTON and A. PENNINGTON, 44, Threadneedle-street, London, E.C.

**MR. THOMAS THOMPSON, JUN., I. PALMERSTON BUILDINGS, BISHOPSGATE STREET, LONDON, E.C.**  
Some valuable hints as to the purchase of mining shares will be found in Mr. Thompson's "Investment Circular" for October, now ready, post free, price 6d.

**NOTICE OF REMOVAL.**  
**MR. THOMAS THOMPSON, JUN.,** begs to inform his clients and friends that he has REMOVED his OFFICE from No. 5, Whitehall, to No. 1, PALMERSTON BUILDINGS, BISHOPSGATE STREET, E.C., to where in future all communications should be addressed.

**MR. THOMAS SPARGO, MINING ENGINEER, STOCK AND SHARE DEALER,**  
224 AND 225, GRESHAM HOUSE, OLD BROAD STREET, LONDON, E.C.

**MR. JOHN RISLEY, (SWORN) STOCK AND SHARE BROKER,**  
77, CORNHILL, advises the immediate purchase of WHEAL GRENVILLE and TRELEIGH WOOD shares.

**SILK AND CO., STOCK AND SHARE BROKERS,**  
32, REGENT STREET, PICCADILLY, W.  
FRANK LILMER, Secretary.

**MESSRS. ENDEAN AND CO., STOCK AND SHARE DEALERS,**  
85, GRACECHURCH STREET, LONDON, E.C.  
All marketable stocks dealt in for cash or account.

**H. W. ASHLANT, 17, PINNERS HALL, OLD BROAD STREET, E.C., SHARE DEALER,** has BUSINESS in the undermentioned:—East Van, Great Laxey, New North Van, Rookhope Valley, San Pedro, Van Consols, Grenville, Pennerley.

**MESSRS. A. ENDEAN, FISHER AND CO., STOCK AND SHARE DEALERS,**  
32, NEW BROAD STREET, E.C.  
Business transacted in all marketable Securities for cash or account.  
A. E. F. and Co. strongly recommend the purchase of Bampfylde Copper Mining Company's shares: investors in this property at present prices will reap large profits. New and valuable discoveries of iron and copper have been made within the last few days. Samples of the ore may be seen at our offices. Application for shares and further information should be made as above.  
FOR SALE.—10 fully paid shares Whitehaven Iron, £8 each.  
Bankers: London and Westminster, Lothbury.

**MESSRS. J. TAYLOR AND CO., ST. JAMES'S CHAMBERS, SOUTH KING STREET, MANCHESTER, AND 3, UNION COURT, OLD BROAD STREET, LONDON, E.C.,** have FOR SALE the following shares:—100 Aberdaunt, 17s. 6d.; 100 Hobb's Hill.  
OFFERS WANTED for Bampfylde and Franco Consols.

**MR. JOHN MOSS, STOCK AND SHARE DEALER,**  
ST. MICHAEL'S CHAMBERS, 42, CORNHILL, E.C.  
Bankers: City Bank, Finch-lane, E.C.

**MR. E. CHARTERS, 8, CRAIG'S COURT, CHARING CROSS, LONDON,** has the FOLLOWING SHARES FOR SALE free of commission:—  
20 Birdseye Creek, £3. 10 East Lovell, £16½. 20 I. X. L., fully paid, £5  
50 Bronfloy, 28s. 15 East Van, £5½. 50 Javall.  
25 Cedar Creek, £2. 10 East Langynog, £2½. 10 New Quebrada.  
35 Castle an Dinas, £23½. 100 Eclipse, 2s. 9d. 20 Wheel Mary, £3.  
CASTLE AN DINAS.—Very favourable reports have been received from the mine.

**MESSRS. BLYTH AND HUTCHINSON, STOCK AND SHARE DEALERS,**  
3, GEORGE YARD, LOMBARD STREET, LONDON, E.C.  
Every information respecting both British and Foreign Mines will be furnished free by post or on application.  
SPECIAL BUSINESS in:—  
Camp Floyd. Bog. Boscawell Downs.  
Last Chance. Van Consols. Cwm Eilan.  
Pacific. Cedar Creek. Wheel Speedwell.  
Price-list daily.  
Bankers: Alliance Bank.

**INVESTORS IN ENGLISH AND FOREIGN BONDS, Railways, Bank Shares, Mines, should consult**  
**THE "INVESTMENT REVIEW,"**  
Independent, Fearless, and Exhaustive.  
By JOHN R. PIKE, STOCK AND SHARE DEALER,  
CROWN CHAMBERS, THREADNEEDLE STREET, LONDON.  
Post free, Threepence.

**IMPORTANT TO INVESTORS IN MINES AND OTHER SECURITIES.**  
**THE LONDON STOCK AND SHARE AGENCY, 165, STRAND,**  
LONDON, desires to draw special attention to the merits of CASTLE AN DINAS and WHEAL MARY TIN MINES, reports of which appear on pages 937 and 938 in this week's Journal. Castle an Dinas Mine has greatly improved in richness and product now that the 25 fm. level has been reached, and the shares are ridiculously cheap at the price this agency is selling them at. Wheal Mary bids fair to become the richest tin mine in Cornwall, and very profitable returns will now be soon made on the small outlay of capital. The LONDON STOCK AND SHARE AGENCY recommends an immediate purchase of shares in both these mines whilst they can be secured. Full particulars of both mines, with reports, will be sent on application.  
Business transacted in all descriptions of stocks and shares at a small rate of commission, references exchanged. Established 1853.  
This day is published an important Journal nominated the "Investors' Monitor." It contains information for the public otherwise not generally obtained. The editor desires to draw attention to this publication simply on its merits; even a cursory glance will be sufficient to prove that the publication is worthy of support. The current number of the "Investors' Monitor" for October contains most valuable, exclusive, and reliable information for all parties seeking investments of a lucrative and dangerous, and no railway or mining undertaking is recommended through the medium of its columns but what bears the stamp of a quick and high remunerative return. The offices of the paper are 165, Strand, London.

**500 BLAKE'S PATENT ORE-CRUSHERS NOW IN USE.**  
For catalogues, apply to—  
MR. H. R. MARSDEN, 50HO FOUNDRY, LEEDS,  
Only maker in the United Kingdom.

**MR. JOHN CARTER, MINE SHARE DEALER,**  
CAMBORNE, CORNWALL, transacts business in every description of shares at close market prices of the day.  
Good Dividend Mine shares may be bought, paying from 10 to 15 per cent.



# THE EAST ROCKS HEMATITE IRON ORE COMPANY (LIMITED).

ST. AUSTELL, CORNWALL.

Registered under the Joint-Stock Companies Acts, 1832 and 1837.

Capital, £100,000, in 20,000 shares of £5 each.

In 10,000 Preference Shares and 10,000 Deferred Shares.

Preference shares are to receive in dividends an amount equal to the capital for the time being paid up thereon, before the Deferred Shares begin to participate in the profits of the company.

## DIRECTORS.

HENRY BRIDSON (Messrs. T. R. Bridson and Sons), Bolton and Manchester.  
SAMUEL CHATWOOD, London, Manchester, and Bolton, Engineer.  
FREDERICK G. GARDINER (Messrs. Gardiner, Ellis, and Dunkerley), Manchester, Iron Merchant.  
J. BERGER SPENCE (Messrs. J. Berger Spence and Co.), London, Manchester, and Glasgow, Merchant.  
DAVID V. STEUART, Victoria Chemical Works, Manchester, Chemical Manufacturer.

(With power to add to their number.)

## BANKERS.

THE UNION BANK OF MANCHESTER (LIMITED),

York-street, Manchester, and Branches.

Messrs. GLYN, MILES, CURRIE, AND CO., Lombard-street, London.

## SOLICITORS.

Messrs. PARTINGTON AND ALLEN,

Town Hall Buildings, King-street, Manchester.

## AUDITORS.

Messrs. BROOME, MURRAY, AND CO., 104, King-street, Manchester.

## SECRETARY.

MR. ROBT. EDWD. JOHNSON.

OFFICES—57, CROSS STREET, MANCHESTER.

This company is formed for the purpose of acquiring the leases of and working the rich hematite iron ore properties, consisting of about 300 acres, lying between the villages of Levron and Risoria on the south and east, and Mollinias and Bugle on the north, all in the parish of St. Austell, Cornwall. The property is situated in the midst of the champion lodes of the county, having the St. Austell and Roche, Witherell, Cold Biggen, and Pawton Mines on the north, and the Knightor, Resugga, Treverbyn, and Ruby Mines on the south, all of which are in active operation. The company has also taken powers to acquire other iron ore properties.

The ore is red and brown hematite, of fine quality, and remarkable for its almost entire freedom from sulphur and phosphorus. Assays taken from the surface of the lodes have been made by E. Riley, Esq., F.C.S., of London, and J. H. Collins, Esq., of Falmouth, copies of which are annexed; in addition to which an analysis of the ore taken from one of the Ruby lodes (which passes through the property) has been made by John Collins, Esq., Analytical Chemist at the Bolton Laboratory, a copy of which is also annexed.

The leases are held for unexpired terms of 21 years from December, 1871, at the low royalties of 1s. a ton upon one portion of the property, and 10s. a ton on the remaining portion, and the minimum rents amount only to £100 and £15 a year respectively, merging into the hematite iron ore is rapidly increasing, both for the manufacture of hematite pig-iron for the Bessemer process, and for admixture with inferior ores; and the proximity of this mine to the smelting districts, as compared with Spanish and other foreign deposits, affords an obvious advantage to this property.

It is estimated that, in a very short period from the time of commencing operations, at least 100 tons of ore can be raised per day, capable of being very largely increased, according as shafts are sunk and levels extended; and, taking into account the advantages possessed by this company in having facilities for cheap water carriage from the Port of Par (to which port the ore may at present be transported direct from the mines), the comparatively low royalties, and the fact that no cash payment is to be made for the property, it is believed that there will be an unusually large return in profit on the amount of paid-up capital.

The cost of the ore, including royalty, delivered at the ports of Par or Charleston will, it is estimated, not exceed 8s. per ton; and if, therefore, the selling price for ore on board at Par be taken at only 22s. 6d. per ton, on a probable output of 50,000 tons per annum, the profit would yield a dividend of over 35 per cent. on the total capital (both deferred and preference shares), whilst if the selling price be assumed at 27s. 6d. per ton (which is considered at its present value) the returns would be over 48 per cent. On the other hand, the directors would point out that even taking the value current twelve months ago as only 17s. 6d. per ton, there would still be a margin of over 23 per cent. available for dividend—thus showing that, under any circumstances, large returns may be confidently expected.

The sets have been inspected by the eminent mining engineers, Prof. Ansted, F.R.S., London, and J. H. Collins, Esq., F.C.S., of Falmouth; also by Capt. David Cook, of North Bonny near the St. Austell and Roche Mines, and Capt. Thomas Hamblay, of the Mulberry Mine, to whose reports the directors have pleasure in referring as confirming the estimate which they have made of the great value of the property.

The only contract entered into on behalf of the company is an agreement, dated the 10th day of September, 1872, between Samuel Chatwood, of the one part, and Frederick Nicholson (as trustee of the company) of the other part, providing for the purchase of the property for so many deferred shares as there shall be preference shares issued for the time being; but such deferred shares, although to be treated as fully paid up, are to receive no dividend until the new profits paid or earned on the preference shares shall equal the capital paid up from time to time on such preference shares, after and subject to which the preference and deferred shares are to receive dividends at the same rate per share, and without regard to the amount paid or called up on such preference shares. The directors have great pleasure in calling particular attention to this new feature in the contract with the vendor, and to point out that no money whatever is to be paid to him for the property except out of net profits, and then only after all capital paid up for the time being by the shareholders shall have been repaid to them, thus giving the shareholders a practical proof of the bona fide character of this undertaking, and of the vendor's confidence in its success.

All expenses of and incidental to forming and registering the company, including all printing, stationery, advertising, stamps, legal and all other expenses up to the allotment of shares, and including the assignment of the leases to the company, are to be paid out of a fixed charge of 1½ per cent. on the nominal capital of the company. In the event of no allotment the deposits will be returned in full.

Samples of the ore, together with the original reports and assays, may be seen at the offices of the company. The leases, together with copies of the Memorandum and Articles of Association and of the above-mentioned agreement of the 10th day of September, 1872, may be seen at the offices of Messrs. PARTINGTON AND ALLEN, Town Hall Buildings, King-street, Manchester.

Applications for shares must be made to the bankers of the company.

## FORM OF APPLICATION FOR SHARES.

To the Directors of the East Rocks Hematite Iron Ore Company (Limited).  
GENTLEMEN,—Having paid to your bankers the sum of £1, being a deposit of £1 per share on shares in the above company, I request you to allot me that number of shares; and I hereby agree to accept such shares, or any less number you may allot to me, and to pay all future calls that may be made upon the same, and I authorise you to insert my name on the Register of Members for the number of shares allotted to me.

Name (in full) .....  
Address .....  
Profession (if any) .....  
Date..... 1872. Signature .....

## BANKERS' RECEIPT.

Received of ..... 1872.  
the sum of £....., being the deposit of £1 per share in the East Rocks Hematite Iron Ore Company (Limited).  
For .....

## REPORTS OF MINING ENGINEERS AND ANALYTICAL CHEMISTS.

To the Directors of the East Rocks Hematite Iron Ore Company.  
GENTLEMEN,—At your request I have visited the sets proposed to be worked by you under this name, and have also visited the neighbouring sets, where the iron lodes passing through East Rocks have been more or less opened on and worked. Your set occupies low ground in the stanniferous district near St. Austell, and is crossed for nearly a mile from south to north by a remarkable and well-known group of cross-courses, all containing regular lodes of hematite. The surface is everywhere covered with rotten granite and china-clay, concealing the lodes, except where the removal of the china-clay on each side lays bare the pink stain that indicates their presence below. Where the lodes enter the hills to the north and south they are seen at the surface, and have been opened by pits and adits. In this way the lodes are proved in the Bilberry set to the north, and in Wheel Ruby and Knightor Ruby sets to the south. In both these and in other places I examined the lodes. The usual thickness, general character, and contents are so regular and well defined in the adjoining sets that no doubt can exist as to their continuance under similar conditions throughout the intermediate ground. At various places within the East Rock set the back of the lodes has been reached, and ore brought out. The quality of the ore thus obtained is more compact and freer from quartz than that in the back to the north and south. This is, no doubt, due to the greater depth, and is consistent with the general experience of iron mining on this group of lodes.

The existence of a very important cross-course of iron, accompanied by parallel lodes also containing hematite, crossing the St. Austell granite, has long been known, and is marked in the Geological Survey Map published by the late Sir H. De la Beche. It is only, however, within the last few years that attention has been drawn to the singularly persistent character of the vast hematite deposit here available, and up to the present time the parts of the lodes that cross the low ground parts, and can be reached and worked with the greatest facility, there is not a shadow of doubt. The precise number of lodes in East Rock set can only be proved by systematic cross-cutting. It is, however, certain that there are several, and those that are known appear to have a breadth of from 7 to 12 feet or even 15 feet. The distance of the lodes asunder is not great, and the intervening country consists of tender granite, very easy and cheap for sinking and driving. There is no probability of any mining difficulties, as the iron lodes are exceptionally regular, and contain ore throughout. The mode of working suggested in the report of Mr. Collins is well adapted to develop the mine rapidly and effectually. I can see no reason why at least 100 tons of ore per day should not be raised within a short time from the commencement of regular work.

The ore consists of an admixture of brown and red hematite, and in the upper

parts of the lodes becomes cellular, and mixed with some quartz. Lower down the quartz appears to be nearly absent, and the ore is remarkably compact. A sample from the back of the principal lode in East Rocks I have sent for assay to Mr. E. Riley. The set is crossed by the mineral tram at present terminating at Par, but shortly to be completed to Fowey. The cost of conveyance of the ore to a market would, therefore, be very small. The distance on the tram to Par is about 6 miles. On the whole, I am perfectly satisfied that large and steady supplies of excellent hematite can be obtained from this set at a very small cost, and by a very moderate rate of outlay of capital. D. T. ANSTED, F.R.S., Consulting Mining Engineer. 8, Duke-street, Adelphi, 12th August, 1872.

## To the Directors of the East Rocks Mining Company.

GENTLEMEN,—I beg to enclose, in reference to my report on the East Rock mining set, forwarded a few days ago, an analysis of a sample of the ore taken by me from the specimens raised from the back of the lode, and lying on the ground on the property. I may remark that the quality is exceptionally good, the absence of sulphur and exceedingly minute quantity of phosphoric acid being remarkable even in red hematites, of which this is a specimen. D. T. ANSTED. 8, Duke-street, Adelphi, London, 16th August, 1872.

| 3, Devonshire-terrace, Kensington, London, W., August 15, 1872.   |        |
|---|--------|
| DEAR SIR,—Herewith I beg to forward you the result of my analysis of the sample of red hematite received from you. The whole of the sample pulverised gave— |        |
| Silica.....   | 3.42   |
| Peroxide of iron.....   | 68.64  |
| Oxide of manganese.....   | 1.52   |
| Alumina.....  | 1.03   |
| Lime.....   | Trace. |
| Magnesia.....   | 0.13   |
| Phosphoric acid.....  | 0.38   |
| Metallic iron per cent.....   | 62.05  |
| EDWARD RILEY, F.C.S., Analytical and Consulting Chemist.  |        |

## EAST ROCKS IRON SETT.

DEAR SIR,—I have, at your request, inspected this property, which is situated in the parish of St. Austell, and I find that there are four, if not five, parallel lodes of excellent iron ore passing directly through the sett. These lodes consist of red and brown hematite, and two of them are the same which—in the Ruby, Knightor, and Treverbyn Mines, directly to the south—have yielded, and are yielding, large quantities of red hematite of first rate quality. Another of the lodes, in the western part of the sett, is now being worked upon close to the northern boundary, where it is found to be about 15 ft. in width, and to consist of mixed brown and red hematite. The railway to Par runs through the sett close to its northern boundary, crossing all the lodes, thus affording great facilities for the transit of ore and materials to and from that Port. I should recommend the following mode of working, which would afford considerable quantities of ore almost from the first:—

a.—A large and well-lined shaft should be sunk perpendicularly near the principal lode, and at the northern boundary of the mine, close to the railway. From this, at different depths, cross-cuts should be driven to the lode, and levels driven north and south from each on the course of the lode. A large quantity of ore would thus be almost immediately available from many different points. From each of these the ore should be trammed to the bottom of the principal shaft, raised at once to the surface, and tipped into the railway trucks. A large engine of the ordinary construction might advantageously be fixed at this shaft, and used for raising ore, as well as for pumping.

b.—During the progress of this engine-shaft other smaller shafts should be sunk at convenient distances, north and south, on the course of the principal lode, and levels driven so as to meet those from the engine-shaft. While sinking these secondary shafts they might be kept free from water either by horse whins, small portable engines, or by 12 in. bore steam engines; but, as completed, each level would have just sufficient fall to bring all the water to the engine-shaft.

c.—As soon as any end was driven in a few fathoms, parties of men should be set to stop down the backs, which could be done at a cheap rate, or boring machinery might be introduced, and the ore got out in underhand stops, thus laying open the mine in a systematic manner, and yielding a good supply of ore almost from the first.

d.—One of the cross-cuts mentioned in (a) that nearest the surface might be extended east and west right across the sett, so as to prove at a moderate depth all the other known lodes. This could be done at a cost from £1 to £1 10s. per fathom, the ground being mostly very easy. In this manner new discoveries might be made, and the best situations for additional works would be certainly indicated.

An expenditure of from £1500 to £2000, exclusive of cost of engine, and of the extended cross-cut mentioned in (d), should so lay open the ground as to yield 100 tons of ore per day, and this output might be readily doubled or trebled as the shafts become deepened, and the number of levels increased. The ore is of first-rate quality, almost entirely free from sulphur or phosphorus, as the annexed analyses of specimens from different parts of the sett, the samples selected, and the analyses made by myself will show:—

| No. 1.—Brown Hematite. No. 2.—Red Hematite. |        |
|---|--------|
| Peroxide of iron.....                       | 71.0   |
| Manganese oxide.....                        | 0.9    |
| Titanic oxide.....                          | Trace. |
| Lime and magnesia.....                      | 1.1    |
| Silica.....                                 | 9.1    |
| Alumina.....                                | 5.0    |
| Water.....                                  | 12.2   |
| Phosphorus.....                             | Trace. |
| Sulphur.....                                | Trace. |
| Metallic iron (per cent.).....              | 49.7   |

Both these ores are well adapted for the manufacture of the best kinds of iron and steel. A picked specimen of brown hematite from the same situation as No. 1 yielded 78.0 per cent. of peroxide of iron, equal to 54.6 of metallic iron; and some large lumps of red hematite from the same locality as No. 2 contained upwards of 64 per cent. of metallic iron.

Polytechnic Hall, Falmouth, July, 1872.

## EAST ROCKS HEMATITE IRON SETT.

DEAR SIR,—The East Rocks hematite iron set is in the heart of the now brisk mining district of St. Austell and Roche, and is about 5 miles distance from the shipping port of Par, and is crossed by the Par Railway. Immediately to the north of this set is a mine called Hallow, in which we are working on a line lode (12 ft. wide) of good brown and red hematite iron ore; the ground being easy, as you may judge from the fact that we are able to raise and deliver the ore at Par—the port of shipping—at the rate of 5s. 6d. per ton. Several iron lodes running north and south pass into East Rocks, as well as the lode we are working on at Hallow, so that similar results may be confidently expected. Through the lowness of the ground the lodes will not be opened up without the aid of steam-power. I should recommend a 30 or 36 in. cylinder rotary engine, for the purposes of pumping and winding. After the engine has been erected, cross-cuts driven, and the lodes opened up, there is every indication that the lodes will prove to be as good as at Ruby and the neighbouring mines on the south, and Hallow, Burnhousey, Cold Biggen, and others on the north; and, in my judgment, this will become a most valuable property. From the ores I have seen at surface, I think that the quality may be relied on to be equal to, if not better than, the ores of the adjoining properties. I have heard from some of the old streamers of tin that in streaming these moors they have passed over very large iron lodes, and through this information we discovered the very valuable iron lode of Hallow.

DAVID COCK, Managing Agent, St. Austell and Roche Mines.

Samuel Chatwood, Esq.,  
Dated Roche, St. Austell, August 9, 1872.

## EAST ROCKS HEMATITE IRON SETT.

August 2, 1872.  
DEAR SIR,—I have inspected the above sett, which is situated in the parish of St. Austell, in the county of Cornwall, about five miles from the Port of Par, and is intersected by the Par Railway, which runs through a portion of the property. Several iron courses, which are north and south lodes, pass through the sett, and have been worked extensively to the north at Bilberry, Treasable, Burnhousey, Cold Biggen, Witherell, Pawton; and on the south the Ruby, Knightor, Treverbyn, Resugga, and Resugga Mines are now working on a large scale. The yield large quantities of red hematite iron, now selling at upwards of 30s. per ton in Wales. On the north, the Cold Biggen, Witherell, Tremoir, and Pawton Mines are now in full operation, and some of them have produced for upwards of 25 years large quantities of red and brown hematite iron. This run of lodes has proved productive for a considerable distance, and I entertain no doubt that large quantities of iron will be raised in East Rocks also, by sinking shafts and opening up deeper levels on the course of lodes. Two years ago I worked at Witherell Mine down to the 50 ft. level, and the iron was still going down below that depth. In the East Rock sett there will be very little land carrying, as the railway which is being extended so as to unite the ports on the north and south, will afford the double advantage of bringing materials to the mine and taking the iron from the mine to the shipping port on either coast at a very cheap rate. A steam-engine will be required to work the sett, as it is in a flat piece of ground, and consequently no levels of importance can be got. A 30-in. engine, erected in the centre of the sett, would not only pump the water, but haul the iron to the surface as well. With regard to this set, my opinion is that when the engine is erected, the shafts sunk, and the mine opened out, the iron can be broken and brought to the surface for 5s. a ton, including interest on capital, wear and tear of machinery, management, and in fact every cost.

THOMAS HAMBLAY, Agent of Mulberry Mine, Lanivet.

| ANALYSIS OF RUBY ORE BY JOHN COLLINS, Esq. |             |
|--|-------------|
| P. Cent.                                   | P. Cent.    |
| Iron Peroxide.....                         | 72.23       |
| Manganese.....                             | 0.61        |
| Silica.....                                | 9.11        |
| Alumina.....                               | 7.93        |
| Lime.....                                  | 0.31        |
| Magnesia.....                              | 0.31        |
| Sulphuric Acid.....                        | 0.05        |
| Phosphoric Acid.....                       | Mere trace. |
| Titanic.....                               | 2.33        |
| Water.....                                 | 6.61        |
| Loss (by diffc.).....                      | 0.60        |
| Metallic iron.....                         | 100.00      |

The ore seems well suited for use in the manufacture of "Bessemer" irons.

The Laboratory, Bolton, 19th December, 1871. JOHN COLLINS.

## BALDWIN SILVER-LEAD MINING COMPANY

(LIMITED).

ISLE OF MAN.

Capital £20,000, in 2000 shares of £10 each,

1119 of which are offered for subscription.

This mine is a progressive one, proved at a cost of £20,000 by private capitalists, who have disposed of their interest in the company for 500 paid-up shares, and will contribute for unpaid shares to the amount of £2510.

Prospectuses, with full particulars, may be had on application to the Secretary, T. B. COLLINGWOOD, Summerhouse, Rochdale.

# UNITED STATES OF AMERICA.—STATE OF ILLINOIS. Issue of 2400 seven per cent. First Mortgage Sinking Fund Gold Bonds of \$100 each, or \$500, of

## THE PARIS AND DECATUR RAILROAD COMPANY.

The Line is 75 miles in length, and the bonds now issued constitute the first and only mortgage, being at the rate of only \$16,000, or \$3200 per mile. Interest payable half-yearly in gold in London at the fixed rate of 4s. 2d. per dollar, equal to £7 5s. 10d. per bond per annum. Also, at the option of the holder, in New York in gold, free of United States tax.

The bonds are redeemable at par, viz., £100, or \$500 per bond in gold, by yearly drawings, commencing July, 1873, by means of a cumulative sinking fund of 2½ per cent., or \$30,000 per annum, and the whole of the bonds are to be paid off by 1st July, 1892.

Price of issue 78 per cent., equal, at 4s. 6d. per dollar, to £87 15s. per bond of £100, or \$500.

The bonds carry interest at 7 per cent. per annum from 1st July last, allowing for which, and the discount for prepayment of instalments, as hereafter referred to, the net cost of each bond is reduced to about £85 5s. per bond.

Calculating the profit to the bondholder on the bond being redeemed at par (£100), equal to about £15 per bond profit, the return to the investor is about 10 per cent. per annum.

Messrs. GRANT BROTHERS AND CO. are prepared to RECEIVE APPLICATIONS for 2400 7 per cent. First Mortgage Sinking Fund Gold Bonds of £100, or \$500 each, of the Paris and Decatur Railroad Company (State of Illinois, United States of America). The price of issue is £87 15s. per bond of £100, or \$500 (equal to £78 per cent. at the exchange of 4s. 6d. per \$1), payable as follows:—

£10 per bond payable on application.

20 " " " 1st November, 1872.

20 " " " 2d December, 1872.

17 15 0 " " 1st January, 1873 (less half-year's coupon, £3 12s. 11d.).

Applicants desirous of anticipating the payment of the instalments can do so on any day when the instalment falls due, under discount at 7 per cent. per annum for such pre-payment.

These bonds constitute the first and only charge on the railway—which is 75 miles in length—connecting the cities of Paris and Decatur, and occupying a very important position in the State of Illinois—the amount of such first mortgage being only at the rate of \$16,000, or \$3200 per mile.

The share capital of the company is \$3,600,000, divided into 32,000 shares of \$50 each, the whole of which has been duly subscribed—upwards of \$1,000,000 duly paid up, and the balance is in process of payment—and the company possesses no power to issue bonds or mortgages beyond the \$1,200,000 first mortgage 7 per cent. bonds now offered for subscription.

With a view to giving a perfect and absolute security to the bondholders, the entire railroad, with all its equipments and appurtenances, is absolutely mortgaged and assigned to the well-known Union Trust Company of New York, as trustees on behalf of the bondholders, each bond being endorsed with the following certificate of such mortgage (which has been duly recorded in each county through which the railroad is to run), duly signed by the President of the Union Trust Company.

TRUSTEE'S CERTIFICATE.

This is to certify that the Paris and Decatur Railroad Company has executed to the Union Trust Company of New York a deed of trust or mortgage, conveying its railroad, built and to be built, from Paris to Decatur, in the State of Illinois, with the equipment and appurtenances thereto, and its franchise, in trust for the benefit of the holders of its bonds referred to within, all bearing even date herewith, issued in pursuance of the said mortgage, such issue not to exceed the sum of \$1,200,000 in the aggregate, being at the rate of \$16,000 per mile for each mile of the said railroad, with power to take possession of the said railroad and its equipment and appurtenances and the said franchise, and to use or sell the same in case of default in the payment of the principal or interest, subject to the control of a majority in amount of the holders of the said bonds then outstanding, and the foregoing is one of the several bonds described in and secured by the said mortgage, and the said mortgage is certified to have been recorded in every county through which the said railroad passes.

(Signed) UNION TRUST COMPANY OF NEW YORK.

By J. H. FROTHINGHAM, President Trustee.  
The bonds, which have coupons attached, bear interest at 7 per cent. per annum, payable in gold half-yearly, on 1st January and 1st July, at the banking houses of Messrs. Grant Brothers and Co., London, at the fixed exchange of 4s. 2d. per dollar equal to £7 5s. 10d. per bond per annum; or, at the option of the holders, at the office of the Union Trust Company of New York, both free of United States Government tax.

The bonds are to be paid off at par—viz., £100 per bond, or \$500—by annual drawings, by the action of a cumulative sinking fund of 2½ per cent. per annum, or \$30,000. The drawings will take place on the first Monday in July in each year, commencing July, 1873, and the whole series of bonds are to be paid off or redeemed by 1st July, 1892.

The number of the bonds so drawn will be advertised within 15 days after such drawing, both in New York and London, for 15 days. The bonds so drawn are to be presented for redemption, within 30 days after the drawing, either in New York, at the offices of the Union Trust Company of New York, or at the banking-house of Messrs. Grant Brothers and Co., in London.

Both principal and interest are payable in gold, free from United States Government tax, and the bonds are to be bearer, transferable from hand to hand without endorsement.

Reckoning the accrued interest on the bonds from 1st July last, and the discount to be allowed on pre-payment of the instalments, the net price of the bonds is reduced to about £85 5s. per bond of £100, or \$500.

Calculating the profit to subscribers on the redemption of the bonds at par (£100 per bond), the return of the amount invested will be about 10 per cent. per annum. If no allotment be made on any application the deposit paid will be returned in full without deduction.

In default of payment of the amount due on allotment, or of any instalment, the allotment and all payments made in respect thereof will be liable to forfeiture.

Script certificates to bearer will be issued against interest letters and receipts for deposits, and will be exchanged for the bonds when all the payments are completed.

The certificate of registration of the mortgage deed, and certificate of the company's power to issue the bonds, with an original bond, may be inspected at the offices of Messrs. Ashurst, Morris, and Co., solicitors, 6, Old Jewry, E.C., London. Applications, which must be made on the annexed form, and accompanied with a deposit of £10 per bond applied for, are to be forwarded to the banking-house of Messrs. Grant Brothers and Co., 24, Lombard-street, E.C., London, of whom prospectuses and forms of application can be had.

24, Lombard-street, E.C., London, Oct. 1, 1872.

The Directors and officers of the Paris and Decatur Railroad Company are:

PRESIDENT—DWIGHT HITCHCOCK, Esq.  
VICE-PRESIDENT—W. T. SYLVESTER, Esq.  
MANAGING DIRECTOR—ROBERT G. HERVEY, Esq.  
SECRETARY—LUCIUS MALISTER, Esq.  
TREASURER—JACOB WILLIS, Esq.

The following details are furnished by the company:—

"The Paris and Decatur Railroad is 75 miles in length, extending from Paris to Decatur, and by arrangement with the Indianapolis and St. Louis Railroad Company, its express trains run over their track to the great manufacturing city of Terre Haute, Indiana (19 miles east of Paris); 45 miles of road are already completed, thoroughly equipped, and in full operation, and it is expected the entire line will be completed and opened by 25th inst.

At Paris, a rapidly growing city, the county seat of Edgar county, the line connects with Indianapolis and St. Louis Railroad, and with two other railroads, the Paris and Danville, and the Paris and North-Eastern, both in course of construction. At Terre Haute the line connects with the Indianapolis and St. Louis Railroad, and the St. Louis, Vandalia, Terre Haute, and Indianapolis Railroad; and the Terre Haute and Cincinnati Railroad is being built, about 25 miles of it being already completed.

At Decatur, one of the most promising cities of Central Illinois, it connects with the Chicago division of the Illinois Central Railroad, forming a new route to Chicago. At Decatur it will connect with the main line of the Illinois Central Railroad, the Toledo, Wabash, and Western Railroad, the Pekin, Lincoln, and Decatur Railroad, the Florida, Atlanta, and Decatur Railroad, and the Monticello Railroad.

The road runs east and west through the wealthy and thickly settled counties of Edgar, Coles, Douglas, Moultrie, and Macon (the Garden of Illinois), and closes the gap in the direct route between the capital of the States of Indiana and Illinois. In respect of the passenger business, the route thus formed, and the local passenger business of the thriving cities and towns along the line of the Paris and Decatur Railroad, the estimated surplus grain to go east exceeds 6,000,000 bushels, while the vast quantities of block coal to go from the coal fields at the eastern end of the road for the smelting furnaces at Chicago, Decatur, Springfield, and other points, it is expected will furnish the line with an immense business.

"The railroad has been built in the most substantial manner, the rails made to special order by the celebrated Vulcan Ironworks of St. Louis, Missouri, under strong guarantee as to quality and wear, and the locomotives, passenger, mail, and express coaches, and rolling stock generally are of the best description, made to specification by eminent American builders."



## CORNISH NOTES—No. I.

By "ARGUS."

On my way into Cornwall I stopped at Plymouth, where I met Mr. Jehu Hitchens, and went with him to *Old Bottle Hill*, a mine his father commenced working about the year 1818. Prior to that time a good deal of tin had been raised by the miners; but Mr. Hitchens, sen., commenced his operations on a large gossan lode for copper, and sold of that metal 50,000£ worth. The lode then turned to tin, and of this from 100,000£ to 200,000£ worth was raised, and for some time the mine paid large profits. It was then worked with varying success—according to the price of tin—by two or three companies, until about two years ago, when the machinery being all out of order, and the tin down to 40£ per ton, the works were stopped, and sold eventually to Mr. Hitchens, who worked it privately, and on a small scale, for about 12 months, paying his way with the broken-down machinery. But when tin rose to 80£ per ton the mine was divided into 1200 shares, and a call of 1£ per share made to erect fresh and more extensive machinery, and during the last 12 months three new water-wheels, two 30 ft. and one 19 ft., working 41 heads of stamps, *all new*, have been erected and got to work. Besides these there are two other wheels, the drawing wheel (30 ft.) to draw by day, and to stamp with 16 heads by night; and a 22 ft. with 12 heads, requiring an outlay of about 40£ to complete, and when complete, there will be 69 heads of stamps. The 41 heads now at work with a full supply of water can stamp 350 tons of stuff a-week, at a cost of about 60£, or 240£ a month; and supposing the stuff to turn out 15 lbs. of tin to the ton, the produce would be about 9 tons, or 720£, a month.

During the summer months the water supply, which is rented at 60£ a-year, falls short, and to remedy this a large reservoir has just been completed, and it can be enlarged to any extent, from time to time, at a trifling expense. The dressing-floors are very primitive, and want an outlay of 30£ or 40£ upon them.

There is an adit 60 fms. deep running through the sett, and above this for 300 fms. long, where the present operations are going on, is the main lode, 10 ft. to 15 ft. wide, with tinstuff of low quality. To work this there are two shafts, about 200 fms. apart—Rowe's and Josiah's. From these enough stuff can be raised to keep any number of stamps going; and Mr. Hitchens's object is, eventually, to get up 100 heads. A few days ago, in cutting down Rowe's shaft below the 24, Bucking-house lode (which had been a very rich lode in the old workings) was intersected 3 to 4 ft. wide. The agent had said nothing of this in his reports, wishing to see more of the lode; and he has now driven 4 fms. upon it, at 4£ per fathom; lode worth from 30£ to 40£ per fathom. Some stones of the tin broken from it will yield 5 per cent. of tin. While I was there we took a handful of the stuff just as it was shot out of the kibble, pounded it and vanned it; and it was equal to from 50 to 70 lbs. to the ton. However, as this may prove a great advantage to the mine, the agent will get 10 tons of it together and stamp it by itself, to test its real value. This may be done, probably, when the stamps are disengaged in about a week or ten days. In considering the prospects of mines just at this time there are many things to be taken into account that did not perplex us years ago; and they will, I fear, have still greater influence on mining ere long. They are—

- 1.—The price of coal, iron, and other materials.
  - 2.—The scarcity and dearth of labour.
  - 3.—The unwillingness of men to work in deep mines, when they can get the same wages by working in shallow mines.
- And, as I may often have to apply these circumstances to different cases as I proceed, I will state in regard to *Old Bottle Hill* that the mine has many special advantages, and for 200£ can raise and sell as much tin as many mines can for 500£. With a deep adit there is no pumping, and all the drawing, stamping, &c., is done by water-power, which costs, as I said before, 60£ a-year.

I should observe that during the time these wheels and stamps have been in course of erection about 1000£ worth of tin has been sold.

**Sept. 30.—New Rosewarne:** This mine, which bids fair to be one of the richest in Cornwall, is about 2½ miles from Camborne, and was formerly worked extensively for copper and tin, but the latter metal was then only 40£ per ton. There are three shafts, the engine or eastern shaft, 74 fms. deep; Bickford's, 94 fms. deep; and Pool's about 70 fms. In the engine shaft there is a 70-inch cylinder engine, and flat-rods have been connected with Bickford's. These will go to work to-morrow, and the mine will be in fork in about a week. Capt. James, the present manager, and upon whose statements, I hear on all sides, the utmost reliance can be placed, informs me that he was one of the last persons down this shaft when last worked, and that the lode was at the then price of metals worth 15£, and at present 30£ per fathom, and that a great deal of tin is standing in the different levels. At Pool shaft there is one of the richest courses of tin in the county, especially about the 46 and 58 fms. levels, and the 67 appears to be now coming into tin. The surface department has been well and judiciously laid out, and a pair of Harvey and Co.'s pneumatic stamps, equal to 20 old heads, are at work, stamping out 100 tons of stuff per week. These stamps work admirably, and are causing a great sensation in Cornwall. Another pair has been ordered, and will be got to work in about three weeks. Before the meeting of shareholders, to be held in the middle of October, Capt. James informs me he shall sell 15 tons of tin (the last sold fetched 96£ per ton). The costs for the three months, including all the new erections, will be 3200£, and after the sale of 15 tons there will be upwards of 20 tons of tin in the mine, *raised and paid for*, and worth nearly 2000£. It is proposed, however, to make a call to clear off all costs of machinery and plant, and then he sees his way clear to commence with dividends in January. The reserves of ore have increased since the last meeting, and are now worth upwards of 20,000£. He also assures me that, with the present prospects of the mine, he can *fairly* raise 15 tons per month, which will leave a good monthly profit. The tin is the richest I ever saw, and the stuff being stamped yields over 3 per cent.

Some croakers in London, while acknowledging the extraordinary richness of the lode, have said that Gwinnear is not a tin district, and therefore it may prove a shallow bunch. The answer to this is, that Gwinnear yielded a good deal of tin when that metal was at a low price, and did not pay to work, and that in New Rosewarne it has been found 20 fms. deeper than the rich deposit at Pool's shaft. Besides, who can say that Gwinnear will not become a rich tin district? Twenty years ago tin was despised in Gwennap, Redruth, and Camborne, and now the rich copper mines of those days are the rich tin mines of the present. Tincroft, Carn Brea, Dolcoath, Basset, Buller, and even Wheal Grenville are all copper mines, and turned to tin in depth. For my own part I consider, and my opinion is borne also by the agents, and by all who have seen the mine, that the district will be very rich for tin, and in New Rosewarne the shareholders have a great prize. If any doubt this, they will do well to write direct to Capt. James, the managing agent, at the mine, near Camborne, and they will get the same honest and straightforward statement of facts which he has given to me on the mine. Of course, if anyone who had inspected New Rosewarne when the rich bunch of tin around Pool's shaft was worth in the aggregate 400£ to 500£ per fathom (and shares were at 11£ each) were to go underground now and report only upon the same bunch of tin he would see a great falling off there; but I write of the prospects of the mine *generally*. I never supposed, nor could anyone suppose, the lodes would continue in the great bunch for any great distance worth 100£ to 200£ per fathom, and would rather see a lode of moderate value and *continuous*, with these rich bunches coming in occasionally. The course of ore has been proved for 70 fms. long, and a most important feature is that the same lode has been cut in New West Rosewarne, more than half-a-mile distant, and worth 60£ per fathom; thus proving that, if subject to rich bunches, the lode is also *continuous*. By no means a bad "combination of circumstances."

Two Japanese gentlemen, one an engineer, and the other a mineralogist, made a special visit to New Rosewarne this afternoon, accompanied by several eminent engineers. Unfortunately, I had left the mine before they arrived, but I understand they expressed great satisfaction at the pneumatic stamps, and could see at once that they must ere long supersede the old stamp heads. They were

also well pleased with the tin, from which they took samples, and several of the party were rather astonished at the great quantity on the mine ready for stamping. But one of the special advantages of this mine, and of New West Rosewarne, and others in the district, is that shafts were sunk and levels driven at an expense of many thousands of pounds, for working the copper, which are now available at once for raising the tin. A vast amount of time and money is thus saved.

**New West Rosewarne** adjoins New Rosewarne to the west, and is on the same lode. A 30-inch engine has been erected to pump and work 16 heads of stamps. The shaft is 70 fms. below adit, and in the opinion of the agents the tin lode was left standing by the old workers at all the levels. In the adit, 24 fms. deep, a cross-cut was put out 9 ft., and intersected the tin lode, which has been opened on 14 or 15 fms. in length, and is worth in the present end 50£ to 60£ per fm. The lode is 10 ft. wide, with precisely the same rich tin as in New Rosewarne. The engine will go to work next week, and the stamps in about three weeks. There are about 3 tons of tin raised, and the agent considers, when all the machinery is complete, he can make good profits at once. I met two or three agents in the mine, who consider the prospects exceedingly good, and the mine is in 1200 shares only.

**Rosewarne United** adjoins New Rosewarne to the east, and was once a rich copper mine 100 fms. deep below adit. It is intended to work it for tin, and to erect a 70-inch engine, but nothing has been done towards it at present, beyond clearing and timbering the shaft to about 4 fms. below the adit of 18 fms., although a large capital was raised some months ago.

**North Rosewarne** is north of New Rosewarne, and a 30-inch engine has been erected, and will go to work in about a month. From the shallow depth down to the adit of 29 fms. the ground has been completely honeycombed for tin by the ancient miners, showing that the lode must have been very productive for that metal. Below this shaft has been sunk about 10 fms., but no levels driven. When the engine gets to work, therefore, the prospects for meeting with a good lode are very favourable.

At **West Condurrow** a cross-cut will intersect the south lode 30 fms. deep, in a few fathoms further driving, and the agent is somewhat sanguine as to the result.

**Wheal Grenville.**—I spent some time here to-day, and went over the mine with the agents, who were, as usual, attentive and polite, notwithstanding they had evidently been studying the "skirmishing onslaughts" of the Secretary upon me. I have no doubt in my own mind, also, that they must have been highly amused at the quantity of dust and smoke their official had managed to raise and scatter around the chief points of dispute.

No change has taken place in the South Condurrow lode, which at present is as hard as nails, and costs 20£ per fathom to drive. There is very little doubt, however, that a good lode will be found here before long; and the agents, as they tell you in their last report, look to it to make the mine a permanent property. But if cut good (and here is my "chief" point), it will take *twelve* months at least to bring it into full play; and what may be required in the meantime for machinery it is impossible for the agents, or anyone else, to tell. The engine is a 60-inch cylinder, pumping from three shafts, one 140 and two 120 fms. deep; the north and flat-rod shafts, having flat rods attached, the latter for 70 fms. in length. There is also a drawing engine and a stamping engine with 32 heads of stamps. These are capable of stamping out 20 tons of tin per month, and the present returns of the mine are about 14 tons, yielding a small monthly profit. When the South Condurrow lode becomes productive, and more stamping power is required, I shall hope to see a pair of pneumatic stamps erected.

I explained to the agents that the "complaints" as to management referred to the principal department, with which they had nothing to do, and I hoped and *believed* that in a year or two they would have one of the richest tin mines in Cornwall. So we parted, but not before I obtained a confirmation from their own lips of what I knew and stated in my correspondence as a *positive fact*—that the north shaft has been sunk from about the 50 on the incline, and that the incline was *away* from South Condurrow. That the South Condurrow lode, which also dips in the same direction, may catch the Grenville in time we all knew. For if two men start to run the same way together, one of them 100 yards in advance of the other, and the man in advance goes at the rate of two miles an hour, and the rear man at the rate of four miles, the latter will in time overtake the former. And this is the case with the South Condurrow and Grenville lodes. The pace of the latter is known, that of the former is all conjecture at present.

**East Grenville** is looking poor; the engine, as at Grenville, is a 60-inch cylinder, and only pumping from one shaft, but it was over-powered for months during the winter, and the delays occasioned by it are scarcely yet got over, and have been a heavy loss to the shareholders. The chief point of interest is the driving the 120 cross-cut to intersect the Grenville and South Condurrow lode, and it is hoped this will be proceeded with, as fast as possible.

I have written this instalment of my notes at odd times and in odd places, and you must pardon all mistakes and imperfections, and wait patiently for the rest.

## Meetings of Public Companies.

## DOMINION OF CANADA OILS REFINERY COMPANY.

A meeting of some of the shareholders was held at the Cannon-street Hotel, on Thursday. The meeting was not official, but called together by Mr. Frederick Nell and his friends.

An official circular, issued by the managing director, state that "A person signing himself Frederick Nell has sent out circulars to the shareholders containing false and libellous assertions respecting myself, for which he will be made accountable. He does not hold a single share in the company, and never was a shareholder. I beg to inform the shareholders that the board have sent a qualified and accredited agent to Canada to examine into and report to the company on all matters connected with the company's affairs, inclusive of accounts, patented processes, and the manufacture of oil. That gentleman is now at Sarnia, and his report will be laid before a general meeting of shareholders as soon as possible, together with a statement of accounts and balance sheet now in course of preparation."

Upon Mr. BETTSON being nominated to the chair, a question arose as to the position of Mr. Nell, whose name, it appeared, was not upon the register of shareholders. Mr. Nell explained that he held in his hand a properly certified transfer of shares from Mr. Howell to himself (Mr. Nell), but that its registration had been refused at the office.

With this explanation, Mr. BETTSON consented to take the chair, and called upon Mr. NELL to make his statement. Mr. NELL proceeded to read a somewhat lengthy statement to the effect that there were two great men in the company—one in England, Mr. Harvey; and the other in Canada, Captain Howell—between whom there had been a quarrel for the last 18 months. There was no doubt whatever that when the manufacture of oil took place large and remunerative profits would be realised, but nothing could be done until Mr. Harvey retired from the company. There was no help but to wind-up the company and reconstitute it. He asked why the shareholders were not called together the first Monday in June, as stipulated by the Articles of Association? He concluded by moving "That, in the opinion of the meeting, a managing director was wholly unnecessary, and that it is desirable such appointment be cancelled as speedily as possible, and that the directors be requested to take steps to vary the article for that purpose."—Mr. CLARE seconded the proposition.

Mr. GRAY rose to address the meeting, when Mr. NELL said it was necessary that the name of a shareholder should be upon the list 14 days before he was allowed to vote.—Mr. GRAY produced certificate.

The CHAIRMAN said that as they had admitted Mr. Nell to be a shareholder, although his name was not upon the register, he (the Chairman) must rule that Mr. GRAY be allowed to speak.

Mr. GRAY said he was very much afraid that the present meeting was the result of personal feeling. He did not think anyone could be so vindictive as to use such language against the managing director without having some animus. It was language against Mr. Nell had not invited Mr. Harvey to be present, rather an unjust thing that Mr. Nell had not invited Mr. Harvey to be present. No notice had been sent to Mr. Harvey, which was obviously unfair to that gentleman. As to the quarrel between them, Mr. Howell had received from this side a salary of interest of the shareholders' hands. Mr. Howell had not made a single drop of oil; and all that no less than 1200£ per annum, and had not made a single drop of oil; and all that Mr. Harvey had done was to endeavour to compel Mr. Howell to carry out his agreement.

Mr. MOORE said that Mr. Harvey had sent out a properly qualified agent to examine into the causes of the delay, and to report fully upon the matter. Under those circumstances, he would propose as an amendment that it is expedient to take the circumstances, he would propose as an amendment that it is expedient to take the matter out of the directors' hands. Mr. G. NICHOLS seconded the amendment. matter out of the directors' hands. Mr. G. NICHOLS seconded the amendment. matter out of the directors' hands. Mr. G. NICHOLS seconded the amendment.

A SHAREHOLDER said he went to the office this morning and was treated most courteously, being allowed to see everything he required. It seemed to him that nothing could be done until the general meeting. It was perfectly clear that no one was responsible for oil not being manufactured but Mr. Howell.

Mr. NELL said that he had just received a letter from Mr. Howell at the oil works, dated Sept. 18, which stated that he had been unable to carry out his promises from no fault of his, and that the works should now be paying good divi-

dends; the works were stopped last fall for six weeks for want of funds. Mr. Call says we have been shamefully treated. He (Mr. Nell) said he gave this letter under all reserve.

Mr. GRAY said he was told that Mr. Howell informed the board that the works were ready on July 8, and afterwards wrote for funds for resumption; adding that he could purchase it for 5s. per barrel, and make 200 per cent. profit.

The CHAIRMAN asked when this machinery was put up, and ready for all making the last. Mr. GRAY did not know when it was put up; it was sent out in June, but preparations had not been made for it, and the result was that throughout the winter there were constant delays, arising from the bricklayers not being able to work during the frosts. He believed 7000£ had been sent out for resumption. The works were ready in July, but since then 1000£ had been sent out for resumption.

After some discussion, it was unanimously agreed to withdraw the resolution and amendment; when it was resolved that the directors be requested to summon an ordinary general meeting of the shareholders within 30 days of the present date, and to lay before such meeting the accounts of the company; and that they be requested to obtain, at the expense of the company, the attendance of Mr. Howell at such meeting.

A vote of thanks to the Chairman terminated the proceedings.

## TERRAS TIN MINING COMPANY.

The half-yearly meeting of shareholders was held at Thomas's Hotel, Grampound-road, on Thursday.

Mr. PEARCE, the Chairman of directors, in the chair.

The circular convening the meeting having been read, the secretary read the report of the directors, which was as follows:—

The directors have much pleasure in presenting their report to the shareholders of the present position of Terras Mine. In consequence of the contractor's desire to secure the best possible stamps some delay has occurred. The directors are glad, however, to be able to state that, in their opinion, he appears to have succeeded in obtaining the object of his wishes in the erection of Willoughby's spring-stamps, eight of which, equal to 80 of the old stamps, are now on the mine, and that he has made arrangements by which additional ones equal to 300 (if on trial found satisfactory) can be erected by the end of the year. The directors are satisfied with the principle of these stamps, which is simple and effective; and if proved that they are suitable, and that there is saving in the expense of fuel in working them, they will be amply sufficient for reducing the supply of elvan and lode tin, which the mine possesses in great abundance, by which the tin produced will be increased to an extent beyond their former anticipations. The great quantity of tin raised during the last six months, though diminished in quantity through the delay occasioned by the want of stamping power, is considerably greater than last half-year, as will be seen by the accounts, which show an increase of over 1000£ in the returns. The directors have to report their satisfaction with the efforts of the contractors during the last six months to fulfil his contract, and their conviction that he will be able to finish the works therein specified by the end of the year. The agents' report will show the particulars of the work which has been done since the last general meeting. From this report it will be seen that the mine is opening up well, and that its various lodes are increasing in value, and holding out the prospects of very large returns of tin in the future. The directors are pleased with his renewed attention to his duties. The directors are glad to see from the profit and loss account that there is a net profit of 1067£ 16s. on the half-year; and they recommended that a dividend of 1s. 6d. per share be declared on the shares issued to the public for the development of the mine. The directors call the attention of the shareholders to the important fact that the elvan stone in depth continues to increase in value. They are also delighted to observe that two new lodes have lately been discovered of great richness—one 10 ft. wide as far as seen, worth about 25£ per fathom in the course of the cross-cut at the engine-shaft; and the other the new east and west lode near the stamps, about 3 ft. wide, worth 16£. From these sources increased quantities of tin may soon be confidently expected.

The statement of accounts was then read, which showed that the receipts were—Balance last account, 700£; amount received for tin, 2168£; making a total of 2868£.—Expenditure: By dividend of 1s. 6d. per share on 13,031 shares, as declared at last meeting, 977£; labour at mine, 538£; materials, 373£; carriage of ores and materials, 42£; royalty on ores, 120£; agency at mine and office expenses, 74£; leaving a balance in favour of the mine of 1067£.

The captain's report was then read, as follows:—

In handing you my report I do so with much pleasure, as, upon the whole, the mine never looked so well as at present. Our prospects at the 40 are cheering indeed, from the fact of our having intersected in the cross-cut a lode of gigantic dimensions, 10 ft. wide, composed of copper, lead, blende, and tin. The tin, however, produced from this part of the mine, is of a quality which is not of the best. It is now one of our chief points of interest and importance in this part of the mine, and will, without doubt, as depth is attained, eventually prove to be one of our best tin-producing lodes. It is all the more encouraging that it is found in the very heart of the soft blue elvan. I would strongly advise the further sinking of the engine-shaft forthwith, so as to be in a position to make these and other lodes available at a deeper point at the earliest possible moment. The very large amount of work done by the old men on these lodes at a shallow depth makes it all the more urgent to extend our workings in this direction. The cross-cut is within about 3 fms. of Edwards's lode. We expect to cut it in about three weeks from the present time; and, from present indications, the lode will be much richer for tin than it has been in the level above. The 30 west, on Edwards's, is being proceeded with; the lode is about 3 ft. wide, worth about 14£ per fathom. We have about 6 fms. more to drive before we reach under the western whim-shaft. Directly this is accomplished we shall commence with the 20, both for the purpose of ventilation and for driving the stuff. A large amount of good paying ground will then be available from this part of the mine. The 30 east, on Edwards's, has been driven into elvan No. 1 for about 38 ft., and we have not yet reached the northern portion of it. It is now hard, and requires blasting. It contains fair quantities of tin, and maintains its general character and appearance. Our object in cutting through it is to see Edwards's lode on the other side. The slope in the back of the 30, on Edwards's lode, yields fair quality stuff, worth about 12£ per fathom. The various slopes on elvan No. 1 are worth on an average about 10£ per cubic fathom. The lode in the level west, on new east and west lode, yields some splendid tinstuff, worth about 14£ per fathom. The 20, which is in the bottom of the deep level, in elvan No. 1, is worth fully 20£ per cubic fathom. With regard to this part of the property, I beg to recommend that an engine-shaft of moderate dimensions, sufficient to carry 10-in. pitwork, be sunk in such a position as to command the two east and west and counter lodes, together with Nos. 1 and 2 elvans. The whole of these can be drained from this particular point, and, if the old stamping machinery be suspended in favour of the new and improved machinery for stamping, the present stamping-engine can be made available for pumping and hauling purposes. This will open out this portion of the mine in a very satisfactory manner, and within reasonable time.

Dr. TAYLOR moved the adoption of the report, and remarked that, having paid much attention to the mine during the last 12 months, he had no hesitation in saying that the mine was in a remarkably prosperous state at the present moment. Hitherto they had been delayed for want of stamps, but he believed they had the right article now, and would have equal to 300 heads of stamps, which would realise a large quantity of tin next year. He believed they might anticipate at least four times more than now. From 20 to 30 tons per month would be obtained at comparatively little expense, as they were really quarrying instead of mining most of the stuff. The new stamps require much less fuel than the old ones, and he anticipated that without difficulty the dividends would be increased, and, perhaps, doubled next year. They had plenty of tinstuff, and would have power to dress it, so that he did not see any hindrance to turning out a large quantity. He was glad to be able to say that the report of the directors was as little coloured as any report could be.

Mr. HAMILTON, in seconding the motion, said he had visited the mine six months ago, and he came with a prejudice against it, but he had a very different opinion to the present meeting. He was much pleased with what he saw, and believed that in 12 months they would have a mine that would surprise them. Capt. Atkinson, he knew, held similar views, and Mr. White felt certain dividends would be doubled next year.

The reports were then put the meeting and adopted unanimously, and a dividend of 1s. 6d. per share was declared.

Mr. MARTIN CALDER, C.E., was appointed to see that the conditions of contract were carried out by Mr. Martien, and to facilitate the transfer of the mine from the contractor to the company at conclusion of contract, which would expire at the end of the year.

The CHAIRMAN announced his intention of retiring from the office of director at the end of the year, owing to business engagements, and he recommended Mr. Darston, of Edinburgh, where many large shareholders resided, to fill the place. The appointment of a director resident at Leeds was also recommended.

Mr. JUSTICE said that, as far as the success of the Terras depended upon new stamps, he was very much pleased to see that they would be no failure.

JOSEPH WILLOUGHBY said that no one had ventured to say that the new stamps were anything but a great success. They would require 75 per cent. less fuel than the old, and the wear and tear of the heads would be a mere nothing.

Dr. TAYLOR, in the highest terms of eulogy, acknowledged the indebtedness of shareholders to Mr. Martien.

Capt. RICKARD said it had given him infinite pleasure to communicate the discovery of the lode at the 40 ft. level. He believed that within a few months the mine would demonstrate by actual results all that had been said in the report. The tinstuff taken from the shallow lodes rivalled almost any lode he had seen in the county; and when they get down deeper very much increased returns might be depended upon. He had never seen a lode in the county equal to that at the 40 ft. level—it was much richer and better defined than at the 30 ft. level, and was now worth fully 25£ per fathom. He had not the slightest doubt but that they would cut through an excellent course of tin at the 50 ft. level. He was well satisfied with the new stamps, and believed they would have 30 per cent. more work done. They would reach the 50 ft. level in the Spring, and then Terras would be in such a position as detractors would pass by.

Mr. PEARCE said that the mine was held by a body of shareholders second to none in the county of Cornwall; and, though he retired as director, he would still hold his shares.

Mr. JAMES had inspected many mines in the county, but believed Terras would be one of the greatest, for he had seen none with so much tin in a shallow depth. Terras had all those indications which other rich mines in the county possessed; and when they found stanniferous elvan the lode was sure to be highly productive for tin. At Polgoth, and other rich mines, they found similar formations; and there was every reason for having the fullest confidence in Terras proving a rich mine.—Other gentlemen also expressed their highest confidence.

Mr. HAMILTON moved a cordial vote of thanks to the directors. They had not been idle, but with faith in the future they had been cautiously and happily laying out the mine. They were large shareholders, and thoroughly straightforward, honest men, on whose word and judgment they might safely rely.—Mr. LAMONT seconded the vote, and said he was highly delighted with what he had seen.—Thanks were also given to Capt. Rickard and Mr. Martien.

Mr. MARTIN, in reply, said his great gratification was in the prosperity of the mine itself, his gratefulness for and confidence in the mine he could not express, especially since cutting the lode at the 40, which was different in character and direction from the other lodes. It ran westward, and was one of the great lodes rector upon the back by the old men for nearly half-a-mile. He was certain they had a mine of immense riches. The lode itself would make a rich mine. It improved in going deeper, so that they might expect one of the richest developments in the county, and he saw no reason why they should not have a dividend of 10s. next year.

Dr. TAYLOR said the oftener he saw the mine the stronger appearance it had of



becoming what they desired—a large dividend mine. He never saw it looking to greater advantage than that day, when so many important points had been brought to notice. The new stamps would be of great service, and he believed next year Terras Mine would return as much tin as almost any mine in Cornwall. He was firmly convinced that they had a valuable mine, which they required working with energy and economy to become all that its firmest friends wished.

#### WHITEHAVEN IRON MINES.

The first ordinary general meeting of shareholders was held, on Monday, at the London Tavern. The chair was occupied by the Right Hon. the Earl of Devon.

The secretary (Mr. J. W. Marshall) read the notice convening the meeting. The directors' report was considered and read.

The noble CHAIRMAN said in the report now submitted to the proprietors it had been the object of the directors to place before the shareholders a full, accurate, and candid statement of the present position of the company's affairs on their properties in South Wales. In regard to those two mining properties which had been acquired by the company, the meeting would have observed that the first—the Eskdale and Mitredale Iron Mines—was situated in two valleys nearly parallel to each other, and converging to a point within four miles of the port of Swansea. The second—the Red Pike Mines, Starling Dodd, and Red Pike Mines—was situated on the northern slope of the Red Pike Mountains, considerably to the north of the mines just referred to, and about midway between the Emmerdale and Butternere Lakes. The noble Chairman then proceeded to say that after certain preliminary trials as to the position of the ore, and as to its continuous character, which had been made antecedent to the formation of the company, and which were of a very satisfactory character, the company had been formed in July, 1871, and the shares were subsequently allotted on the 13th of the same month. The directors were then appointed, and they proceeded without delay to take the best measures they could for improving and utilising the property of the company. There were three measures to adopt in order to make and realise, as far as they could, the profits which had been and were now expected ultimately to result from the working of their property. In the first place, they had to obtain an adequate supply of labourers, and then, with a view of securing their permanent stay at the mines, suitable accommodation had to be provided for them. They had next to improve the then existing communication between the mines and the port by the construction of a railway or tramway; and, having obtained labour, they had to lay open the mines on a larger scale than previously laid out. Without troubling the meeting with what, perhaps, would be an unnecessary repetition in detail, as already given in the report, of the causes of the delay which had taken place in regard to the carrying out of these various operations, he would venture to say this much—the directors had not failed to make all the endeavours in their power to accomplish these objects. As the meeting was aware, the property was held upon a favourable lease for a long number of years. Now, in various letters received by the board from shareholders, the directors had been censured for not acquiring sufficient land to erect cottages for labourers while acquiring the property itself. But in reply to that he would observe that the directors considered it more to the interest of the company that those cottages should be erected upon freehold rather than on leasehold land. And, as those who had any experience in such matters would readily understand, the delays and obstacles to be contended with in the endeavour to purchase land suitable for the purpose required were very great. The board had, however, succeeded at length in procuring, in an eligible situation, and at a very reasonable rate—something under 500*l.*—a property sufficient for 30 cottages, affording accommodation for about 110 men. Of that number of cottages six were now occupied, 12 were nearly ready for occupation, and the board would lose no time in erecting the remainder. With reference to the Floutern Tarn Mine, the noble Chairman stated that owing to the fact of its being situated in a somewhat inaccessible district the board had devoted its attention more particularly to the prosecution of the mining operations at the Eskdale and Mitredale Mines, which were more easy of access. But enough, however, had been done at the former property, as, no doubt, the meeting would have observed from the report of the local manager, Mr. Hosking, to prove the value and continuous character of its veins. But it must be borne in mind that each of those mining properties, in order to render the ore produced readily transportable to the market, and involving as little delay and cost as possible, would require the formation of a tramway connecting them with the main line, running north and south along the coast. To form and complete this tramway had been the anxious endeavour of the directors, and after much consideration, looking to the nature of the country through which it would pass, and the possibility of carrying a passenger and goods traffic hereafter, they had thought it would prove beneficial to the interests of the company if, in lieu of a tramway, a railway line were constructed. Acting in accordance with such an opinion prompt steps were at once taken towards carrying out such a scheme, but subsequently, after the parliamentary plans and surveys had been made, and were deposited in due time in accordance with the standing orders of the House of Commons, it had been found, on due consideration of their legal position, that such a line could not be legally constructed by this company. Under these circumstances the directors have been compelled to fall back to the intention originally expressed of making mineral tramways, and which, immediately on the conclusion of the negotiations now pending for the purchase of the land along the route, would be at once commenced. The directors had at different times visited the mines and gone over the land along which the tramway would run, and had satisfied themselves that it could be made at a comparatively little expense, and in a comparatively short time, as soon as the land was acquired. In the meantime the ore was being carried down by road. With regard to the quality of the ore, the noble Chairman observed that, in addition to the reports of Prof. Ansted and other mining authorities which had accompanied the prospectus, several shareholders, more or less acquainted with the subject, had testified to the high quality of their ore. (Hear, hear.) In respect to the supply of labour, the security of which hitherto had materially operated to the disadvantage of the company, he (the noble Chairman) stated that the last advice received from Mr. Hosking informed the board that he was endeavouring, so far as possible, to overcome this difficulty. In conclusion, he would observe that he was not at all surprised that the shareholders should feel much annoyed at the delay which had taken place, and at the time the money necessarily elapsed before there could be any profitable returns upon the money they had invested. Nobody could regret that delay more deeply than the directors, and they only felt justified in saying that they had not willingly allowed any delay to intervene, or any obstacle to present itself without being overcome, with which they could practically and satisfactorily deal. The delays which had occurred were attributable to causes over which the board had no control—to causes which, if the shareholders continued to repose confidence in the directors, they hoped to be able to deal with satisfactorily at an early period. In moving the adoption of the report and accounts, he could only say, on behalf of his colleagues and himself, that they did so in confidence that the statement now before the meeting represented accurately, and with perfect truth, the state of things; and if not so satisfactory, they could have wished, they believed that it was one that gave no reason to doubt or question the ultimate prosperity and value of the property in which they had interested themselves. The noble Chairman then moved, "That the directors' report and accounts, duly audited, and as now submitted, be, and they are now, received and adopted." A DINNER was then served, and the meeting terminated.

A SHAREHOLDER then rose, and in referring in detail to the various matters connected with the company, censured somewhat strictly the management of their affairs. In particular, he considered that a great deal of time and money had been needlessly lost in promoting the absurd scheme of constructing a railway, the natural difficulties of the country, and the almost total absence of traffic, rendering such a proposition impracticable in the extreme. (Hear, hear.)

The noble CHAIRMAN, in reply to questions, said the labourers' cottages, although built of neither brick or stone, were, he thought, a better name than shanties, as applied by the hon. proprietor. In regard to the purchase of money, of the sum of 65,000*l.*, only 15,000*l.* was paid in cash, the rest being paid in shares.

Mr. COPELAND then addressed the meeting at considerable length. He drew the attention of the meeting to the fact that in the original prospectus it had been stated that twelve months after the formation of this company the tramway, which was already surveyed and contracted for, would be completed, and that large quantities of ore would be delivered from the mines. It was now fifteen months since the undertaking was started, and the progress that had been made was very small. Very little ore had been sent to the market, and he knew for a fact that it was six weeks or two months since the last quantity was transported. Yet the directors told them in their report that there were several hundred tons lying on the mountain slope, and this statement he could fully corroborate; but such announcements as these only served to strengthen his conviction that they required greater energy in the management. The great need of the company at present was for men of more ability, and who would take an energetic interest in the undertaking, at the head of affairs—not ornamental directors. (Hear, hear.) There was not the least doubt that they possessed an extensive and very valuable property; from the opinions expressed in the locality, and other sources, he had learnt that, but to ensure its success there must be greater energy displayed on the direction.

A prolonged discussion then ensued, in the course of which the retirement of three of the directors since the formation of the company was alluded to, it being stated, in reply to a question, that so far as the board were aware, their resignations had been tendered in each case for private reasons. It was further intimated that Lord Ruthven (the director retiring by rotation on the present occasion) declined to offer himself for re-election. Several other matters were touched upon, and much dissatisfaction was generally expressed with the statements made as to the position of the company.

A SHAREHOLDER observed that it was rumoured the directors had not paid personally for their shares. He desired an explanation on this point.

The noble CHAIRMAN replied that the holdings of every member of the board were presented by the vendor.

It was stated, in answer to other questions, that the cost of the construction of the tramway would amount to 10,000*l.* or 11,000*l.*, 1000*l.* or 1500*l.* for the rolling stock, &c., and about a similar sum would be required for the purchase of the land along the route.

Eventually, after considerable further discussion, Mr. GROVE moved, as an amendment, "That a committee of investigation be appointed to confer with the directors, consisting of 15 or 16 of the largest shareholders on the register when it closed on Sept. 1, and that they be authorised to call in any professional services, and incur any expenses which may appear to them necessary to carry on such investigation; and that the committee report to a subsequent meeting of proprietors."

This motion, on being seconded, involved further discussion, at the conclusion of which it was suggested by the noble CHAIRMAN that, instead of the amendment for a committee being pressed, several of the shareholders should be elected to seats at the board.

This proposition being in accordance with the views of the meeting, Mr. GROVE consented to withdraw his amendment, when the original resolution, moving the adoption of the report, was put and carried unanimously.

The following shareholders were then elected as directors:—Messrs. T. B. Hall, John Jennings, Copeland, and Trehailey.

A resolution moving the re-appointment of retiring auditors was then passed, and the sum of 10*l.* was voted to them as remuneration.

A vote of thanks to the Chairman and directors having been accorded, the proceedings were brought to a close.

WEST BASSET.—At the meeting, on Thursday, the accounts showed that the debit balance at the last account was 2346*l.*, and the credit was 2108*l.*, June 26, and July 27, 1872, the total expenditure being 10,767*l.* On the receipt side, copper had been sold realising 889*l.*, and tin realising 4830*l.*, and on account of the call made at the last meeting, 2320*l.* had been received out of 3000*l.* The remaining 118*l.* they considered as good, and this they considered very satisfactory.

The balance against the mine on the last three months' working was 1965*l.*, and to pay this off the committee of management proposed a call of 6*l.* 8*l.* per share, which would produce about 2000*l.* This would enable them to commence with a clean book. The matter of the disputed forfeited shares was next considered. The managers compromised the matter with Messrs. Williamson by paying them 600*l.*, and it was now suggested that the shares should be put up to auction. Mr. Holman asked if the affair was legally settled? The Chairman said it was; and the money absolutely paid. It did not appear in the present account because it was thought better to work off the whole affair. A formal resolution empowering the committee to sell the shares in the way they deemed best for the general benefit of the adventurers having been carried without dissent, the Chairman instructed Mr. John Burgess, auctioneer, to sell them to the present company by auction, free of calls and commission, the money to be paid by Oct. 1. They were then put up in lots of five, the buyer to have the option of taking five more at the same price. The bidding was spirited; the first and last lots fetched the highest prices. Mr. E. H. Rodd bought the first five at 10*l.* each. Mr. James Evans, who has by far the largest interest in the mine, bought 70—40 at 9*l.* 7*l.* 6*l.*, 10 at 9*l.* 15*l.*, 5 at 9*l.* 11*l.*, and 10 at 9*l.* 11*l.* 6*l.* Mr. Barrett secured 10 at 9*l.* 10*l.* 6*l.*; Mr. Nicholls 10 at the same price; and Capt. Putter 10 at 9*l.* 10*l.*

GREEN HURTH LEAD MINING COMPANY.—The directors have declared a dividend of 3*l.* per share, payable on the 7th inst., this being the third dividend of this amount since May last.

FURZE HILL.—At the meeting, on Sept. 26 (Mr. E. BETTELEY in the chair), the directors' and agents' reports were received and adopted, but the statement of accounts does not accompany them. The directors, after considerable trouble, have obtained a supply of water for drawing and stamping purposes. It is now brought to the mine, and the work of raising tin ore and making it marketable will be proceeded with as rapidly as possible. A small parcel of tin, realising 215*l.* 11*l.* 8*l.*, has been sold. Capt. W. Doidge reported upon the various points of operation.

TRELEIGH WOOD UNITED.—At the meeting the offer of the New Treleigh 50-inch cylinder engine, with all belonging to it, at cost price, 350*l.*, was accepted, and the engineers instructed to remove and erect the same immediately in the engine-house belonging to the mine; it being distinctly understood and agreed that the engineer's estimate of 69*l.* shall place the engine in a state of perfect and approved repair.

BOSWORTH.—The accounts presented at a meeting held on Tuesday showed a debit balance of about 100*l.* Mr. Coulson having relinquished the purser'ship, Mr. Walter Pike, of Camborne, was appointed to succeed him. A call of 10*l.* per share was made, which leaves a fair balance for the prosecution of the mine. Small returns of tin are already being made, and these it is expected will largely increase upon the completion of the stamps and other dressing machinery. [For remainder of Meetings see to-day's Supplement.]

On Tuesday, at South Zeal, a pleasing presentation was made by the employees in the FURDON GREAT CONSOLS COPPER MINE, and others in the neighbourhood, to Mr. M. E. JOBLING, the managing director of the above mine, in order to show their appreciation of the successful and energetic manner in which he has conducted the mine for the last eighteen months. The testimonial consisted of three handsome pieces of silver. The proceedings commenced at 7:30 p.m. at the Oxenham Arms, where the Rev. J. Bliss, the newly appointed vicar, in a suitable speech, which was feelingly responded to by Mr. Jobling, made the presentation. A vote of thanks was accorded to the Chairman, who then retired, and the rest of the evening was spent in music and dancing. The room was tastefully decorated by the ladies, of whom there was a goodly muster, and the pleasantness of the evening was not a little augmented by the presence of the Okehampton band, who, in order to show respect to Mr. Jobling, came over and played a choice selection of music. Thanks are due to Mr. R. J. Curson for his successful conduct of the proceedings.

#### GREAT LAXEY MINES—THE STRIKE.

TO THE EDITOR OF THE MINING JOURNAL.

Sir,—My attention has been called to a production which appeared in one of your contemporaries of Saturday last, purporting to emanate from the "Laxeys Miners on Strike," and headed as their reply to the directors' circular of Sept. 24. In this reply it is asserted that the sum of 76*l.* was paid to imaginary persons on April 5 last. This statement is a gross untruth, as it can be undeniably proved that every farthing charged on the cost-sheet referred to was paid for work done in connection with the mines.

Laxeys Glen, Isle of Man, Oct. 1.

R. ROWE.

#### MINING NOTABILIA.

[EXTRACTS FROM OUR MINING CORRESPONDENCE.]

ST. AGNES CONSOLS.—There is no change this week, but there are points of considerable importance to come off shortly, and but one result is anticipated. It is considered probable, by those best acquainted with the property, that this is likely to be one of the richest mines in the St. Agnes district.

WEST WHEEL GORLAND.—The improving condition of this mine continues to excite attention in its immediate neighbourhood. The various points of operation are now valued at 100*l.* per fathom in the aggregate. The parcel of tin sold last week reached 88*l.* per ton, and not 11*l.* as mentioned by error in last week's report. As the machinery is now approaching completion larger sales and larger profits may be confidently anticipated in the future. There is an immense quantity of rich ore ground in reserve waiting for the new stamps, now nearly ready to be dressed for market.

WEST ESKAIR LEE.—These mines have been visited during the past week by some influential and practical gentlemen connected with the company. They expressed themselves highly pleased and gratified with the appearance of both mines. The western mine, which has remained nearly idle for the past six weeks, in consequence of a draught of water, is now in full working order, and has commenced again to return ore, a parcel of 25 tons having been sent to market this week. Operations will not be interrupted here for the future, as the company have constructed at a great expense a vast reservoir, capable of holding sufficient water for every purpose all the year round. At the eastern mine the lode has been taken down during the week, and has turned out to be richer than ever before seen, proving that the more the mine is developed, the more valuable it is becoming. This company bids fair to take the lead in the Cardiganshire mines for productiveness of profit.

BURRA BURRA.—This famed Australian copper mine has again become remunerative, the fifty-sixth dividend having been declared of 50 per cent., payable in London on the 10th inst.

BUDNICK CONSOLS.—The high price which tin now commands naturally points to the re-working of mines which, although proved to be highly valuable, have never been properly developed. The Budnick Consols Mine, situated in the parish of Perranzabuloe, near Truro, one of the richest mineral districts of this county, is one of these. The mine is very extensive, about 1 mile in length and ½ mile in breadth, the operations have been carried on during the last 100 years, and hundreds of thousands of pounds worth of tin have been sold, and tons of thousands paid in dividends. The mine is only 60 fms. below the adit, where it is reported remunerative lodes exist, and with a small outlay large returns may be made. The directors and the secretary having great experience in mining, nothing but profit results could well follow.

WHEEL DANIEL.—The pitches in this mine are turning out remarkably well. At the sale of tinstuff, on Friday last, 63 tons produced 187*l.*, or an average of about 3*l.* per ton. Two men got a sturt of 48*l.*, and three others 39*l.* for a little over a fortnight's work. With the present comparatively small working cost it must soon be reduced to a minimum.

SOUTH CONDERROW.—I am glad to see the above mine is again making considerable progress, and that it is increasing its sales of tin, having sold on Sept. 25, 12 tons 10 cwt. 9 q. 27 lbs., amounting to 1069*l.* 15*l.* 6*l.* I have no doubt that the high opinion formed of it will be realised.

PENNERLEY.—I cannot understand how it is that this mine having increased its sales to 75 tons of lead, the shares have retrograded, whilst the mine is doing well and prospects good.

SOUTH FOWEY CONSOLS.—It is very encouraging to notice by the agent's report, in another column, that two important improvements have occurred in this mine since the general meeting, held on Aug. 15, having cut a tin lode near 2 feet wide, at the depth of 10 fms. from surface, to the south of old men's workings. Also in the western part, from Sawle's shaft, which is about 25 fms. from surface, the lode in the adit end is about 3½ feet wide, and producing some rich ore, of yellow copper ore, a sample of which, by assay, produced 17½ per cent. for copper.

ABERYSTWYTH (Silver-Lead).—The directors paid a visit to these mines last week, and were highly satisfied with the progress that had been made since the company commenced working them on June 8, and also with the prospects they see before them. The Bwlch Gwyn wheel has been connected with the Penrhew engine shaft, and the water is now being pumped out of the bottom of the mines. When that has been done (in about a fortnight), the main line of operations—the sinking the Penrhew engine shaft to the depth of 50 fms. below the adit—will be proceeded with. About 22 fathoms remain to be sunk, and levels will then be driven east and west on the course of the lode. Meanwhile, at Penrhew, a winze below the 38 to the adit; between the 25 and 38 west there is, on a low 40 east, and at a distance of 6 or 7 fms. further will get under the ore ground, which has already been tested, and has yielded ore in three places below the 30. The dressing of the ore is going on actively, and it will not be long before there will be a quantity ready for the market.

EMMA AND FLAGSTAFF.—We clip the following from the weekly Mining Summary of the *Salt Lake Herald* of Sept. 14:—Emma: This mine shipped daily for the past week an average of 85 tons of ore, and could have easily shipped 100 tons per day except for a lack of freight capacity. In fact, for some time to come the daily shipments of ore may be readily made to exceed the latter figure. Of the ore freighted to market about 45 tons is hoisted through the whim that taps the upper workings of the mine, and the remainder is taken out through the old mine, and passing around the locality of the timber wreck of last spring, is a very substantial piece of work. The timbers are 12 in. square, and solidly boarded exteriorly with 3 in. plank; and as the route of the tunnel lies through a stratum of hard rock, it is impossible that it should ever give way from pressure. The debris of the gallery has been cleared away, and there is no water in the mine except a few feet in the bottom of the deepest shaft, and this will be exhausted in a few days. This shaft is 200 ft. from the mouth of the tunnel, and 153 ft. deep below its level, and from its bottom, at the time of the flood and cave, the richest ore ever discovered

in the mine was taken. As soon as the water is exhausted work will be resumed on this rich stratum of ore. An immense quantity of timber and supplies have been being laid in against winter, houses constructed, &c. Before the spring thaw precautions will be taken against the seepage from the melting snow, and greater pumping power provided. About 120 men are employed, independent of 60 or 70 teamsters.—Flagstaff: Yielding as large a quantity of freight ore as at any time since discovery. About 20 teams are constantly engaged in freighting ore to the furnaces—a number inadequate to remove the ore as fast as it can be mined by the present force of hands. A second tunnel, still lower down the hill than the first, is being run, and when completed will lessen the expenses of operating the mine.

#### Registration of New Companies.

The following Joint-Stock Companies have been registered:—

JACKSON, GILL, AND COMPANY (Limited).—Capital, 100,000*l.*, in 1000 shares of 100*l.* each. This is the conversion into a limited liability company of an existing firm of iron manufacturers and engineers, carrying on business at the Imperial Ironworks, at Eston, near Middlesbrough, Yorkshire. The subscribers are—Ralph Jackson, Normanby, Yorkshire, 110 shares; William Gill, Middlesbrough, 50; E. Crowe, 3 Commercial-street, Middlesbrough, 10; George Gill, 19, Grange road, Middlesbrough, 50; C. H. Minchin, Normanby, Middlesbrough, 10; James Taylor, 2 Commercial-street, Middlesbrough, 20; George Dyson, 2 Exchange-place, Middlesbrough, 10.

LONDON AND SOUTH WALES COAL COMPANY (Limited).—Capital, 200,000*l.*, in 20,000 shares of 10*l.* each. To work a colliery in the parish of Ystradgynaf, Glamorganshire. The subscribers are—E. H. Watts, Newcastle-upon-Tyne, 2000 shares; J. H. Johnson, 15, Mark-lane, 2000; James Duke Hill, Coal Exchange, 1000; Thomas Stokoe, Newcastle, 1000; Edward Stout, Newcastle, 1000; H. F. Swan, Newcastle, 1000; W. Milburn, Newcastle, 2000.

HOCKLEY HALL COLLIERIES (Limited).—Capital 100,000*l.*, in 10,000 shares of 10*l.* each. To acquire and work collieries in the township of Wilcote, Warwickshire. The subscribers are—G. Davison, Ridgmount, Warwick, 200; G. F. Beville, Bury-street, St. James's, 200; F. H. Smith, Gothic House, Peckham, 200; John Tanner, South Norwood, 200; W. H. Beck, 139, Cannon-street, 200; Alfred Hersee, Queen's-road, Peckham, 200; E. P. Brown, Brixton-hill, 200.

PATENT LIGNO MINERAL PAVING COMPANY (Limited).—Capital 50,000*l.*, in 10,000 shares of 5*l.* each. For acquiring and working patents in connection with improvements in paving blocks, or slabs of wood, and fixing the same. The subscribers are—W. Crookes, Morlington road, 50; Henry Chapman, 34, Forest Hill, 10; A. N. Armani, 35, Poultry, 100; Hugh McLean, Derby Villas, Forest Hill, 100; M. Greene, Gresham House, E.C., 100; W. W. Lynington, Halstead, 100; William Murray, 37, St. Mary Axe, 5.

LIVERPOOL SHIPOWNERS COMPANY (Limited).—Capital 100,000*l.*, in 20,000 shares of 5*l.* each. For manufacturing and repairing ships and vessels for ocean or inland navigation. The subscribers are—James Butterworth, Liverpool, 7, Edward-street, Liverpool, 30 shares; Charles Ratcliffe, 74, South Castle-street, 20; W. J. Venables, St. Paul's-square, Southport, 10; C. F. Himes, Southport, 10; J. Milmore, 7, Lord-street, Liverpool, 10; R. Banks, Lord-street, Liverpool, 30; J. B. Culeham, 7, Castle-street, Liverpool, 10.

DUKINFIELD HALL SPINNING COMPANY (Limited).—Capital 40,000*l.*, in 8000 shares of 5*l.* each. To acquire lands and premises, and to purchase or erect machinery for the purpose of carrying on the business of cotton spinners and manufacturers.

PLYMOUTH STARCH WORKS (Limited).—Capital 10,000*l.*, in 2000 shares of 5*l.* each. The objects proposed by this company are the purchase of rice, maize, and other similar commodities, and the manufacture of starch, sago, cornflour, &c., for sale.

INVESTORS' PROTECTION ASSOCIATION (Limited).—Capital 5000*l.*, in 5000 shares of 1*l.* each. To protect the rights and interests of shareholders in public companies, and to take proceedings against companies not complying with the Companies Acts, &c.

SELF-REGISTERING OMNIBUS COMPANY (Limited).—Capital 25,000*l.*, in 5000 shares of 5*l.* each. For purchasing and working a patent taken out by Mr. G. E. Donisthorpe, entitled a "Register for Public Carriages," to build omnibuses or tram cars, &c.

HULL, YORKSHIRE, AND LINCOLNSHIRE PATENT ASPHALTE PAVING COMPANY (Limited).—Capital 30,000*l.*, in 12,000 shares of 2*l.* 10*l.* Manufacture and selling asphalt for paving purposes, especially in connection with Mr. Frederick Barnett's patents.

#### FOREIGN MINES.

UTAH.—J. R. Murphy, Aug. 8: We commenced on the 5th inst. to raise ore from winze No. 2. A level is being run from winze No. 1 to No. 3, along Red Warrior lode. Some 60 ft. further has to be run to connection. The shaft is 143 ft. deep at date. The stratum of ore cut in sinking in this shaft the past week has been gone through, showing a thickness of 3 ft., chiefly pyrites of iron. There is every evidence of the near approach of the main vein in the bottom of the shaft. Number of tons smelted this week, 136½; bullion produced, 63½ tons; balance of produce over cost, \$1661.30.

SWEETLAND CREEK.—G. D. McLean, Sept. 7: New Tunnel in the 1540 Feet Level: We are getting on well with the slip, working only two men ten hours by day. We are through the point, and have broken through to daylight with the top of the tunnel, but have some 30 or 40 ft. of an open cutting yet to drive. After this is done we will have to go below the tunnel and deepen the grade, then widen the tunnel and put in some timbers to sustain it, and some side-lings to protect the walls from the winter floods, all of which will be done in the next season. The new tunnel is progressing finely from the three faces, and the greater portion of the driving will be completed by Dec. 1. The upper face will then be to drive about 100 ft. the shaft to raise, and the sluices to put in blocks, &c.

CEDAR CREEK.—Advices have been received from the superintendent, J. B. Ludlum, dated Sept. 7, as follows:—I note your remarks relative to improvements, and will forward my recommendations in a few days. I have been busily engaged for some days past making close examinations and estimates with this object in view. This day I forward the following cable:—"Lavington, London, August 30th, 1872.—Ludlum." I finish the run on the Pacific claim on purchased water. As I wrote you, the gross returns amounted to \$394,486; the total expense amounted to \$270,128; leaving a net profit of \$124,358. The Deep Shaft claim continues as I wrote last, I shall not have this claim cleared off this season. I am making another run with the Pacific entirely on purchased water; but will be obliged to clean up about the 18th, as the agent of the other water company has informed me that his supply will be exhausted by that time.

CAMP FLOYD (Silver).—E. B. Wilder, Sept. 5: Our operations at the mine for the month of August are as follows:—We have extracted 360 tons of ore, the average of which is \$45 per ton silver. In drift from shaft No. 3 the vein matter assays with the ore it carries from \$10 to \$15 per ton; this drift we are still pushing ahead, trusting to meeting with a higher grade of ore. On the extreme north-western portion I have started a prospecting shaft, in hopes to strike a body of ore making towards us from an adjoining mine. We are now 41 ft. deep with the same, passing thus far through limestone and a low grade of ore, but without meeting with ore, as we must go deeper, owing to the difference of elevation between our shaft and that of the outside mine. From incline No. 3 we are still getting good ore. In incline No. 1 we have plenty of ore, but the quality, or grade, is somewhat lower than heretofore; hence the average of \$45 per ton. Last Chance cut No. 1 without change, yielding good ore, but limited as to quantity. Near this cut we have since I discovered some good ore, and have now two men at work at this point with promising results, it being evidently a continuation of the same body we formerly struck, and which was cut off by a barrier of country rock. The horse-wheel is now being raised, the curtains having been set, and in a few days we shall commence sinking. The tramroad is in good order, and works well, having 10,000 tons of ore, of which 1200 tons have been transferred to the mill by the cars. The pay-roll of men employed at the mine, embracing carpenters on whom, amounts to \$2792 14 c.

I have to report the following regarding the working of the mill from Aug. 6 to Aug. 31:—The mill has been in operation for 25 days during the above period, and has crushed and reduced 957,600 lbs. of ore, with an assay value of \$24,141.00, and yielding in bullion \$20,049.94, being a trifle over 83.05 per cent. As stated in former reports, during the 30 days of July in which the contractors had the running of the mill in order to comply with their contract, it was almost impossible to obtain with accuracy the actual results, apart from the bullion, of materials used, loss of quicksilver, &c.; the latter of necessity greater, owing to the mill being new and untried. The loss for July you will notice at 1700 lbs., and August 1600 lbs. The loss in July per ton is a little over 4 lbs., and for Aug. a little over 3½ lbs. per ton. This loss, to a great extent, must be attributed to our ore, they being of the anomalous description; and Mr. Belding finds it—the quicksilver—passing off in a minute form when impregnated or coming in contact with the antimony, and floating off from the settlers. The ores reduced in a raw state, or without wasting, are worked up to 83 and 84; while, on the other hand, 63 tons of the same description, passed through the furnaces gave but 65 per cent., causing a diminution in the working of 15 and 19 per cent., showing conclusively that better results are attained thus far without the furnace, as a loss in silver was actually the result. The ore being in a chloride state, must evidently, to a certain extent, have passed off the silver with the antimony from the furnace in a volatile form, and the loss of quicksilver was still greater with the wasted ore than with the raw.

The engine consumes seven cords of wood every 24 hours, dry furnace about one-half cord. A damper has been placed in the smoke-stack to prevent the escape of heat, and with attention on the part of the engineers and fireman a reduction of fuel must be the result. The substitution of the 40 screen in place of the 50, in the crushing of the ore, is not so great in its results as Mr. Belding and myself anticipated it would be, and hence but a slight gain has been attained per day in number of tons crushed. July, with a 50 screen, gave about 18 tons per day, and August a little over 19 tons. Mr. Belding intends trying a still coarser screen, as the reduction in regard to fineness of the pulp, between 50 and 40, was barely perceptible, and if we can obtain the pulp in a proper state for amalgamation, and at the same time increase the quantity of ore from 10 to 22 tons, we shall do it, with the same grade of ore the results are as good as with the 50. On Aug. 31, 27 tons of bullion has been shipped, averaging \$1467.91 each, with an average fineness of 994. The pay roll of men amounts to \$2879.87. There are a number of articles going to mill account that can be arrived at only by referring to the bills of sale, and which properly should come under the head of incidental expenses. We have dispensed with the night fireman, by making the night engineer attend to that portion of the work without an increase of pay. Everything working well.

ALAMILLOS.—Sept. 25: The lode in the 60, driving west of San Rafael shaft, continues quite unproductive. In the 50, driving west of San Francisco shaft, the lode fluctuates, but is of a very promising appearance, yielding 1 ton of ore per fathom. The lode is small and poor in the 50, driving east of La Magdalena shaft. The 75, driving east of La Magdalena shaft, is opening out a valuable piece of tribute ground, yielding 2 tons of ore per fathom. The lode in the 85, east of Taylor's engine-shaft, yields occasional stones of lead, producing ¼ ton of ore per fathom. The lode in the 85, driving west of Taylor's engine-shaft, is getting more open, and letting out a good deal of water. The 50, west of San Yago, and the 50, east of Alejandro winze, will communicate to each other in the course of a few days; the lode yields ¼ ton per fathom. The lode in the 40, driving east of Cox's shaft, is large, but does not contain enough lead to value. The lode in the 50, east of San Victor's shaft, is small and poor, and the ground very hard for drift.



**HOLLOWAY'S PILLS.**—In bilious disorders, sick headache, indigestion, and affections of the nerves, these famous pills, so highly appreciated in all quarters of the world, are regarded as a perfect remedy. They purify the blood, regulate the secretions, give tone to the stomach, restore the appetite, and renovate the system. After a course of these pills the once emaciated and feeble patient is so changed that his friends are both wonderstruck and delighted. These cheap preservatives of life and health are a blessing to mankind. It would be hardly possible to overstate the good that they have effected in diseases wrought through maltreatment or neglect, and such a mastery over the frame that their operation seemed perfectly hopeless.

Castle An Dinas.—T. P. Rkyn, W. Bucknought, Oct. 3: The rise from the west to the open slope east is complete, and the stamps are now partly supplied from this slope, which is very productive for tin. The stamps are also partly supplied from the western slope: here the quality of the tinstuff, although at so shallow a depth, is very good. The incline tramroad in the west slope has been extended to

mine hereafter when that shaft is sunk to deeper levels. In the present bottom of the shaft we have about 4 ft. in width of the lode, which contains strong mungie, good stones of blende, and spots of lead ore, altogether a much more promising zone than where cross-cut through in the 48 or last. In cutting the pit we shall be more of the lode, and the shaft to the 70 or 76 doubles the pass through the width of the lode to the south wall. In the 23, going west, by six men, we had a large vug or cavity for the last 2 fathoms, the sides of which were lined with blende and strings of lead ore; the present end is again in solid ground, and worth 1 ton of blende per fathom.

**FLORENCE.** Peter Floyd, John Searle, Oct. 2: Eliza's Engine-Shaft: In the 20, driving wheel, the lode is 4 ft. wide, worth 87¢ per fathom; driving by eight men, at 10¢. per fathom. In the 20, driving wheel, the lode is 3 ft. wide, and producing a little tin, but not enough to value, but presents every appearance of improving; driving by four men, at 4¢. per fathom. In the 20, driving wheel, the lode is 2 ft. wide, worth 10¢. per fathom; driving by four men, at 3¢. per fathom. The lode in the deep adit adit, driving west of shaft, is 3 ft. wide, worth 12¢. per fathom: driving by four men, at 3¢. 10¢. per fathom. In the 20, from surface, west of Eliza's shaft, we







been engaged putting in the necessary timber, fixing tackle, &c., at the 13, also making a ring round two sides of the shaft to collect the water as much as possible to one place. The shaft has been excessively wet since the heavy falls of snow had a week ago. The shaft is now down about 2 fms. 3 ft. below the 13, level driving north-east from Fyne's shaft is easy for progress, but unproductive. The level driving south from cross-cut, on Goddard's lode, which has been hard during the past month, is now beginning to open out again, and a little



At Redruth Ticketing, on Thursday, 2574 tons of copper ore were sold, realising 11,612*l*. 11*s*. 6*d*. The particulars of the sale were—Average standard, 100*l*. 17*s*.; average produce, 74; average price per ton, 4*l*. 10*s*.; quantity of fine copper, 185 tons 7 cwt*s*. The following are the particulars of the sales:—

| Date.    | Tons. | Standard. | Produce. | Per ton. | Per unit.                  | Ore copper. |
|----------|-------|-----------|----------|----------|----------------------------|-------------|
| Sept. 5. | 1187  | 1113      | 19       | 6        | 14 <i>s</i> . 6 <i>d</i> . | £71 12      |
| Oct. 19. | 3567  | 105       | 0        | 6        | 14 <i>s</i> . 6 <i>d</i> . | 63 16       |
| Oct. 19. | 1253  | 100       | 17       | 0        | 12                         | 62 14       |

Compared with the last sale, the decline has been in the standard 1*s*. 5*d*. and in the price per ton of ore about 1*s*.

At Swansea Ticketing, on Tuesday, 2126 tons of copper ore were



Average standard for 9 per cent. produce, 100l. 10s.; average produce, 18½; average price per ton, 14l. 12s.; quantity of fine copper, 393 tons 6 cwt. The following are the particulars of the last sales:—

| Date.          | Tons. | Standard. | Produce. | Per ton. | Per unit. | Ore copper. |
|----------------|-------|-----------|----------|----------|-----------|-------------|
| Sept. 17, 2393 | 100   | 10        | 18½      | 14 12 0  | 15        | 8 0 0       |
| Oct. 1, 2126   | 100   | 10        | 18½      | 14 12 0  | 15        | 8 0 0       |

Compared with the last sale, the decline has been in the standard 2l. 7s. 6d., and in the price per ton of ore about 8s. 9d. There will be no sale on Oct. 22.

The MINING SHARE MARKET at the beginning of the week was very active, and a large business was done in Van Consoles, Grenville, New Rosewarne, Tincroft, Cook's Kitchen, Tankerville, West Tankerville, Hingston Down, Treleigh Wood, and a few others. On Thursday, when it was known the Bank had advanced its rate to 5 per cent., and that the tin market was flatter, a reaction set in, and since then dulness has prevailed. The Banca sale on Wednesday, which averaged nearly 157½, laid down here, was considered to be the commencement of a great rise in that metal, and that the English smelters would at once advance the standard 5l. or 6l. To the surprise of everybody Straits tin has since then declined to 147½. The standard for copper ore on Thursday also declined 15s.; these combined have caused the flatness in the market. West Frances, 17 to 18; the dialling of the 94 fm. level, west of Pascoe's, in South Frances, has been completed by Mr. Henderson, C.E., and it appears that that level has been driven over 37 fathoms into West Frances, and as the stoping in the back and bottom has been considerable, it is estimated that 400 fms. of lode has been wrongfully removed. It is believed that there have also been encroachments in deeper levels. As the dispute can merely be as to the amount repayable by South Frances, it is not thought that the adjustment will give rise to unsurmountable difficulties. South Frances, 5 to 7½.

East Pool, 16 to 17; the dispute between this mine and South Crofty has now been finally settled, the amount awarded by the arbitrators to South Crofty having been paid. Van Consoles have been strong buyers at 5½ to 5½, but leave off 4½ to 5½. Wheel Grenville shares, after being firm at 9½, declined to 9, 9½, sellers; the agent's report states that good stones of tin are being met with, and that a further improvement may be expected as they advance on the lode. West Basset shares have advanced to 10, buyers, call paid; the mine is said to be improving. New Rosewarne shares have been very largely dealt in, from 6 to 6½. East Lovell, 17 to 18; the lode in the engine-shaft is worth 70l. per fathom; the winze below the 80 is worth 40l.; and at Tregonebris they have taken the slimes out of the bottom, and there find a splendid lode going down for 12 or 14 fms. in length, and worth 40l. to 50l. per fathom. Prince of Wales, 9s. to 11s.; the south part of the lode in the 90 west has been cut into 4½ ft., and as far as seen is good work for tin.

Old Bottle Hill, 10 to 15; the mine is looking well, and bids fair to be a good dividend-paying one. Bog, 1½ to 2; Carn Brea, 155 to 160. Cooks Kitchen weaker, at 29 to 31. Devon Great Consols, 65 to 70; Dolcoath, 70 to 75; East Basset, 27 to 29; East Caradon, 4½ to 5; East Chiverton, 10s. to 15s.; East Van, 8½ to 8½; East Grenville, 1½ to 1½; Great Caradon, 10s. to 15s.; Great Laxey, 13 to 14; Great Vor, 5½ to 5½; Herodsfoot, 17½ to 20; Hingston Down, 6½ to 6½; Marke Valley, 4½ to 4½; Belowda Beacon, 1½ to 2; Assheton, 4½ to 4½; St. Agnes Consols, 3½ to 3½; Medlyn Moor, 70 to 80; Nangiles, 10s. to 15s.; New North Van, 1½ to 1½; North Levant, 15 to 17; North Lovell, 4 to 4½; North Treleigh Wood, 2½ to 3; Parys Mountain, 1½ to 2½; Penhalls, 3½ to 4; Pennerley, 2½ to 2½; Perkins Beach, 17s. 6d. to 22s. 6d.; Plymington, 1 to 1½; Perran Wheel Vyvan, 2 to 2½; Providence Mines, 21 to 23; Roman Gravel, 16½ to 17½; Rookhope Valley, 2½ to 3½; South Carn Brea, 2½ to 3½; South Caradon, 200 to 220; South Condurrow, 5½ to 6; South Roman Gravel, 15s. to 20s.; Tankerville, 14½ to 15½; Tincroft, 58 to 60; Trumpet Consols, 14 to 15; Van, 35 to 40.

South Kitty, 2½ to 3; New Charlotte, 2 to 2½; West Chiverton, 8½ to 9; West Maria, 17s. 6d. to 22s. 6d.; West Polbreen, 4 to 4½; West Seton, 65 to 70. West Tankerville shares have been largely dealt in, and leave off strong, buyers at 3½ to 3½. West Tolgus, 17½ to 20; Wheel Agne, 8 to 9; Wheel Kitty (St. Agnes), 14 to 15; Mary Ann, 9 to 11; Wheel Speedwell, 4 to 4½; Wheel Uny, 4½ to 5½. At the Teras Mine meeting, on Thursday, the accounts showed a credit balance of 1067l. The position of the mine was considered to be very satisfactory. A dividend of 1s. 6d. per share was declared. The Green Hurth Mine has declared a dividend of 3s. per share (the third of similar amount since May), but the shares are seldom quoted in the London market.

In Foreign Mines, Emma shares have advanced to 24, 25. Australian United, 1 to 1½; Eberhardt and Aurora, 6 to 6½; Frontino, 7s. 6d. to 12s. 6d.; Pacific, 3½ to 3½; St. John del Rey, 16 to 18; Sweetland Creek, 3½ to 3½; Utah, 2½ to 2½; Thornhill Reef, par to ½ prem. Bischoffsheim's Certificate for Erie shares are 38½ to 38½.

Messrs. Grant Brothers and Co. announce that the lists of application for the issue of 2400 Seven per Cent. First Mortgage Sinking Fund Gold Bonds of 100l. sterling each, or \$6000, of the Paris and Decatur Railway Company will be closed on Tuesday next, the 8th inst., for London, and on Wednesday, the 9th inst., for the country. The bonds are 1½ and 2½ prem.

The Tasmanian Main Line Railway Company (Limited) have received advice from their agent in Hobart Town of the first quarter's guaranteed interest having been duly paid over to the credit of the company by the Tasmanian Government, in accordance with the contract.

DUBLIN, OCT. 4.—We have had rather a dull week of it upon our Stock Exchange; the apprehension of dear money has caused speculation to be dull, and almost all our stocks have a drooping tendency. Bank of Ireland Stock has declined ½ per cent. Nationals are weak. Nationals of Liverpool are also lower. Steam stocks are firm. City of Dublin Stock has advanced to 104. Glasgow Steam shares in demand at 67. Mining shares are rather steady. Berehaven's have advanced 1s. per share. Cape Coppers are 1l., with ex div. Connore Stock is dull, and has declined 2 per cent. Killaloe Slate shares are firm, at 18s.; sellers at 20s. The last dividend, paid in August, on these shares was 6d. per share, or at the rate of 5 per cent. per annum; a drop of 1 per cent. upon last dividend. Mining Company of Ireland shares are very firm at 9½. Wicklow Copper shares have fluctuated a good deal, upon rumour of no dividend this half-year, and have fallen from 7½ to 6½; from this price an advance took place to 4½, but this was not maintained, the market relapsing to 7½ at close. Owing to the death of the late managing director the accounts and reports for the past half-year have been kept rather backward, but in a few days the directors' report is expected to be published, and then more will be known of the state of the company. Alliance Gas shares are very heavy; the reduction in the dividend of 2 per cent., and a call of 2l. per share, have caused a gloomy feeling to come over the market. A movement is on foot to reduce the expense, and to dispense with some of the directors and officials. Dublin Tramways are dull. Railways are all dull, and have not much animation in them; the traffic returns this week are not so good as last year except in some cases. Great Southern and Western traffic returns have been over 1400l., and the Midland Great Western, 800l. Dublin Tramway receipts are 84l. less this week than last on 5½ miles open. The Gresham Hotel Company have announced a dividend of 2s. 6d. per share on 5l. all paid; selling at 2½, buyers at 2½.

The market for Mine Shares on the Stock Exchange during the week has been generally more active; quotations have ruled comparatively steady, and the aspect of the market is of a much more encouraging character. In American descriptions the feature of the week has been the advance in Emma shares. In home mines increased attention has been directed to the leading dividend and progressive lead mines, and in some instances an important advance has been established. Tin and copper mines have been comparatively neglected.

Emma shares, after advancing to 26, 27, close 24 to 24½; the 11th dividend has been declared; 1760 tons of ore have been raised during September, and 1540 tons sold at the mine. The Chairman, as already announced, has arrived at the mine, but there has not yet been time to receive any letter from him.

Flagstaff, 15½ to 16, ex div.; everything is progressing satisfactorily. Mr. Frames, the director who recently visited the mine, will arrive in this country on Oct. 25, when his report will be submitted to the shareholders, which, judging from the telegram already received, cannot fail to be of a satisfactory character. The last week's product was 68 tons of bullion, which is fully up to the average. Last Chance, par to ½ prem. The official circular appears in another column.

Camp Floyd, 12½ to 13; there has been a rumour that the ore had fallen off in value, and shares have slightly suffered in consequence. We, however, fail to discover this from the reports for August, published in another column. One prospecting drift had been stopped, and a prospecting shaft started instead, while the agent reports a discovery of good ore near the Last Chance cut, and the average value of the ore remains the same as originally mentioned—\$45 per ton silver. The mill was apparently doing good work, and the com-

pany obtaining over 83 per cent. of the silver in the ore melted, this, too, being all on second-class ore. There still remained on hand, stacked ready for milling, 2498 tons, which, valued at only \$45 per ton, is worth over 22,000l. Taking the actual expenditure on all accounts from the value of the bullion produced in July and August the accounts show a profit of nearly 3000l. on the two months' working, and to this there will have to be added the payments made on capital account, and included in the expenditure above referred to.

Utah, 2½ to 3; the weekly report appears in another column; it shows that the agent was still making small profits, that for the week ending Aug. 8 being about 3200l. There can be no doubt but that Mr. Murphy has now mastered the difficult ores he had to treat, as he has been successfully dealing with them, and making profits for several successive weeks.

Pacific, 3½ to 3½; the usual weekly report appears in another column. It shows that all the work was being pushed on in a satisfactory manner, and that the mine still looked rich. The agent was melting another lot of ore at the Manhattan Mill.

Richmond Consolidated shares remain without change, 6½ to 6½; the product for the week is \$9700 from 206 tons of ore. Eberhardt shares have declined to 5½ to 6½; the report of the directors (which appears elsewhere) is regarded as unsatisfactory. South Aurora shares have improved to 1½, 2, upon favourable advices.

In Hydraulic Mines, the chief feature has been the advance in Malpasos shares, which close 1½ to 1½ prem. The advices, which appear in another column, show that washing has fairly commenced, some 15,000 tons, according to the superintendent's measurements, having been washed in the first 18 days, with a bank of gravel only 15 feet high. The result of the first clean up is expected by telegram, via Kingston, about Oct. 14. A large business has also been done in Rica shares, at 2s. to 3s. prem.; work is being pushed rapidly ahead, and everything points to a speedy commencement of active operations. Should the result of the working of the Malpasos deposit—the first hydraulic mine of the United States of Columbia—prove anything like what its adherents anticipate, a great excitement about mines in that vicinity will probably follow. The promoters of the Malpasos Company have already secured all the properties in that part of the country which are to be obtained at reasonable figures.

Sweetland Creek, 3½ to 3½; the agent, G. D. McLean, reports that the tunnel is in 1540 ft., and that he shall finish the drive by the end of November. He is making extraordinary progress with this work. Birdseye Creek, 2½ to 3; the works here progress as usual. The superintendent is pushing on the work with all speed. The tunnel and shaft are in a fair way for completion, and everything is running smoothly. Cedar Creek, 2½ to 3; a correspondent writes that after a thorough examination of the property he is convinced that it will this winter pay more than Mr. G. D. McLean stated. The superintendent, Mr. J. B. Ludlam, is putting everything in working order for the coming season, and intends to work seven claims continuously, and have one more ready to utilise surplus water when possible, and he puts down the profit at \$20,000 monthly.

Holcombe Valley, 1 to 1½; this company was registered in the spring of this year, the shares having been privately subscribed. The project has since remained in abeyance pending the perfection of the titles and the obtaining patents to the property; the whole of this has now been satisfactorily settled, and during the last week the shares have been allotted. The capital of the company is small, being only 4000l., in shares of 1l. each, and from the nature of the reports from Mr. G. D. McLean and others, read at the statutory meeting a short time since, it is thought the company will prove a very prosperous one as soon as work is commenced.

Port Phillip, ½ to 1; the gold obtained during the month ending July 16 was 1279 ozs., obtained from 5290 tons, the average being 4 dwts. 20 grs.; the receipts were 4881l., and the payments 3657l., leaving a profit of 1223l. The amount divided between the two companies was 1000l.; of which the Port Phillip Company's proportion is 650l. During the two weeks ending July 30, there were 626 ozs. of gold obtained, the average per ton of ore having been 5 dwts. from the quartz and 5 dwts. 5 grs. from the pyrites. Telegraphic information in anticipation of the mail due on Oct. 28 states that during August the yield of gold per ton of quartz was 5 dwts. 6 grs. Almada and Tiritio, ½ to 1; the net profit for August, after deducting all expenses, is 1600l.

In Lead Mines a large amount of business has been transacted. Van shares remain at 37 to 40; there is no change here, the mine is being vigorously opened up, and the new shaft will soon be deep enough for a 60 fm. level. The directors have this week declared their usual quarterly dividend of 14s. per share, payable on the 14th inst. The sales of ore from this mine are now made every four weeks, so that the company have 13 sales in the year, and although the last one was 450 tons, as against 500 tons the previous month, the actual reduction is only a little over 10 tons per month. Roman Gravel shares have been in request, at 17 to 17½; a dividend for the quarter of 6s. per share has been declared; the actual profits during the three months admitted of a larger dividend, but the directors have prudently declared 6s., against 5s. per share for the four previous quarters. The mine at all points continues to fully maintain its value. West Tankerville shares have advanced to 3½, 3½, upon the important discovery referred to last week, and the generally satisfactory way in which the mine is opening out. The California (new) engine-shaft, which is 20 fms. below the deep adit (50 fms. from surface), is sinking through a lode worth from 4 tons to 5 tons of rich lead ore per fathom, with (the manager states) all the appearance at the present time of being the top of a very productive run of ore ground. Three weeks since the bottom of the shaft was worth 1½ ton, but is now valued at 65l. per fathom, there being in the middle of the shaft a solid course of lead 18 in. wide. The completion of the boundary adit (referred to in the Journal a fortnight since), which has taken two years to complete, will enable the new shaft to be expeditiously proceeded with, at an increased depth of 40 fms., and sinking is progressing at the rate of 4 to 5 fms. per month; this shaft will intersect the productive lodes which come in from Roman Gravel. The present aggregate value of the different points of operation is over 160l. per fathom. Assheton shares have also been in request, and close at 4½ to 4½; a further improvement is announced. Van Consoles, 5 to 5½; the shares have been in active demand, and the mine continues to open out in a satisfactory manner. East Van shares are dull, at 8½ to 8½. Great Laxey, 13 to 14; it is reported that the dues under the new lease will be one-eighth.

Bog, 1½ to 2½; the clearing of the shaft is still being pushed on with other operations, as before mentioned. Pennerley, 2½ to 3; the works here are in their usual course; at Potter's Pit the appearances are good for a discovery of ore. Perkins Beach, ½ to 1½; the south cross-cut is apparently nearing the lode, as the ground has become softer and more mineralised, besides carrying more spar; other parts of the mine are looking rather better. The company sampled 25 tons of ore this week.

In Tin Mines the only change of importance is the advance in the price of East Lovell.

Subjoined are the closing quotations:—

| Share                 | Price   |
|-----------------------|---|
| Carn Brea, 155 to 165 | Devon Great Consols (10,240 shares), 6½ to 7; East Caradon, 5 to 5½; Great Wheel Vor, 5 to 5½; Marke Valley, 4½ to 4½; North Roskear, 12 to 14; Pennerley, 2½ to 3; Parys Mountain, 1½ to 2½; Roman Gravel, 17 to 17½; South Condurrow, 5½ to 6; Tankerville, 15½ to 16; Tincroft, 57½ to 60; Van, 37½ to 42½; Van Consoles, 5 to 5½; West Chiverton, 8½ to 9; West Tankerville, 3½ to 3½; Alamillos, 1 to 1½ (ex div.); Almada and Tiritio, ½ to 1½; Anglo-American, ¾ to 1; ditto, 15 per cent. preference, ¾ to 1½; Anglo-Brazilian, ¾ to ¾ dis.; Australian, 1½ to 1½; Australian United Gold, 1 to 1½; Birdseye Creek, 2½ to 3½; Camp Floyd, 12½ to 13; Cape Copper, 18 to 20 prem. (ex div.); Chontales Consolidated, ¾ to ¾; ditto, 1½ to 1½ dis.; Colorado Terrible, 2½ to 3; Copiapo, 2 to 3; Don Pedro, 1½ to 1½ prem.; Eberhardt, 5½ to 6½; Elipso, 1-16 to 5-16; Emma Mining, 24 to 24½, x.d.; Flanagan, 15½ to 16; Fortuna, 3¼ to 3¾, x.d.; Frontino and Bolivia, ¾ to ¾; Flanagan, 15½ to 16; General Brazilian, 3-16 to 5-16; Gold Run, ¾ to 1; Kapunda, ¾ to ¾ dis.; Linares, 2½ to 3, ex dividend; London and Californian, 1½ to 2; Lusitania, 12½ to 13½ dis.; Malpasos, 1½ to 1½ prem.; Pacific, 3½ to 3½; Panulicillo, 4½ to 5; Pestarena, ¾ to ¾; Pontigband, 10 to 20; Port Phillip, ½ dis. to par; Rica, 3-16 to 5-16 prem.; Richmond Consolidated, 6½ to 6½; Rosa Grande (17s. pd.), ¾ to ¾ dis.; Russia Copper, 5½ to 6; Silver Flume, 1½ to 2; Scottish Australian, 1½ to 2; Sweetland Creek, 3½ to 3½; Sierra Buttes, ¾ to ¾ ex div.; South Africa, 2½ to 3½; Vanadur Coal, 1 to 1½ prem.; Yorks Peninsula, 1-16ths to 3-16ths; Yudanmutana, ¾ to ¾. |

Messrs. Grant Brothers and Co. are inviting subscriptions for 2400 Seven per Cent. First Mortgage Sinking Fund Gold Bonds of 100l. each of the PARIS AND DECATUR RAILWAY COMPANY, having first

fully satisfied themselves of the bona fide character of the line and the satisfactory nature of its prospects, and believing the security to be of a very complete character. The price of issue is 87½, 15s. per 100l. bond, and they will carry interest at the rate of 7½, 10d. per bond per annum. Calculating the profit to the bondholder on the bond being redeemed at par (100l.) equal to about 15l. per bond profit, the return to the investor is about 10 per cent. per annum. The bonds constitute the first and only charge on the railway, which is 75 miles in length, connecting the cities of Paris and Decatur, and occupying a very important position in the State of Illinois. The amount of this first mortgage is only at the rate of 3290l. per mile. The Union Trust Company of New York has accepted the trusteeship on behalf of the bondholders. At Paris, a rapidly growing city, the county seat of Edgar, the line connects with the Indianapolis and St. Louis railroad, and with two others in course of construction, and at Terre Haute and Arcola there are also excellent connections, whilst at Decatur it will connect with the main line of the Illinois Central, Toledo, Wabash and Western, Pekin and Lincoln, Ploria and Atlanta, and Monticello railroads. The line is well and substantially built, and the locomotives and rolling stock generally are of the best description. The prospectus will be found elsewhere.

The EAST ROCKS HEMATITE IRON ORE COMPANY has been formed for the purpose of working extensive deposits of hematite in Cornwall. The properties are situated in the parish of St. Austell, and within convenient distance of Par. At this port the ore can be delivered, f.o.b., for 8s. per ton, and as the hematite is of first-rate quality it will fetch a high price for consumption in the steel manufacturing districts of Wales and elsewhere. The promoters anticipate an output of 50,000 tons per annum, at a profit of from 14s. to 20s. per ton. The capital is 100,000l. in 20,000 shares of 5l. each, on the total of which, at this rate of profit, there will be available for dividend a balance equal to from 35 to 50 per cent. on the total capital; but as only 10,000 shares are offered for subscription, the remainder being deferred for the vendor, the profits will be subject to division on not more than half this amount until dividends equal to the whole of the then subscribed capital have been paid. The vendor, willing to promote a full development of the mines, agrees to accept payment in shares only, conditional to this preference claim, after which he shall be considered for dividend on a value exactly similar to that of the subscribers. No preliminary payment being made, the conditions are thus unusually favourable to investors, who may expect from the directors an economical and energetic management. It may be mentioned that Mr. Chatwood, the vendor, is the gentleman who, in May last year, introduced at the Rocks Tin Mine the system of paying miners their wages every four weeks, which has been so largely adopted throughout Cornwall, and what the commencement of the present year further introduced to the manifest advantage of the men, and the satisfaction of all concerned. The prospectus will be found in another column.

## ZINC AND LEAD ORES.

I BUY at the HIGHEST PRICES:—  
BLEND.—CALCINED and RAW CALAMINE (carbonate or silicate).  
LEAD ORES.—LEAD-SILVER ORES.—SILVER-LEAD ORES.  
ZINC AND LEAD ORES MIXED TOGETHER.  
SILVER-LEAD, BULLION, HARD LEAD, &c.  
SULPHATE OF LEAD, ASHES, SLAGS, &c.  
I BUY any quantities, however large, contracting for as many years as desired. Particulars by letter.

ARMAND FALLIZE, Ingénieur, à Liège (Belgium).

## CAPPER PASS AND SON, BRISTOL,

ARE PURCHASERS OF  
HARD LEAD, LEAD ASHES, SULPHATE OF LEAD, LEAD SLAGS,  
TIN AND TERNE ASHES, and  
DROSS or REFUSE, containing COPPER, TIN, LEAD, or ANTIMONY.

## Mr. E. H. MORTON, F.C.S.,

ANALYTICAL AND CONSULTING CHEMIST.

DOCK STREET,  
NEWPORT, MONMOUTH.

## TENDERS FOR COPPER.

MESSRS. JAMES AND SHAKESPEARE WILL RECEIVE, on or before noon Friday, 11th inst., TENDERS for the PURCHASE of a QUANTITY of ENGLISH COPPER, consisting of SELECT, TOUGH, and SHEETS.

Particulars and forms of tender may be obtained on application at their office,—10, AUSTINFRIARS, E.C., LONDON.

## PUDOLYTHE.

THE NEW PATENT SAFETY BLASTING POWDER.

THIS EXPLOSIVE, REMARKABLE FOR ITS ECONOMY, SAFETY, and POWER, can be DELIVERED at £33 PER TON, or in 100 lb. cases, as trial samples.

For particulars, apply to LONDON AGENTS,—

MESSRS. A. AND C. MILLAR, 52, COAL EXCHANGE, LONDON, E.C.

## IRTHLINGBOROUGH IRONWORKS, WELLINGBOROUGH.—

CHEMISTRY, AND METALLURGY OF IRON.  
There is a VACANCY for a PUPIL in the LABORATORY at MESSRS. BUTLIN'S IRONWORKS, WELLINGBOROUGH, where he will have an opportunity of obtaining a thorough knowledge of INORGANIC CHEMISTRY, including the analysis of ores and other minerals; and also the application of CHEMISTRY to the practical working of the ores of the district.  
Chemistry, including analysis and assaying, is taught in a well-furnished laboratory by an experienced Analytical Chemist, who is an Associate of the Royal School of Mines in the Metallurgical Division.  
Address, W. BUTLIN, Esq., Duston House, Duston, Northamptonshire.

## TO LEAD SMELTERS.

WANTED, a SMELTER, who can BUILD and WORK LEAD FURNACES on the CALCINING and FLOWING PRINCIPLE, to proceed to SOUTH AMERICA. Wages, £10 per month, with everything provided.  
Testimonials to be forwarded to J. HARRIS and Co., Merchants, 22A, Austinfriars, London, E.C.

## WANTED, AN UNDERVIEWER.

WANTED, a COMPETENT, EXPERIENCED, ACTIVE, and THOROUGHLY PRACTICAL UNDERVIEWER, for a LARGE COLLIERY in the county of DURHAM.  
Apply to "P. C.," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

WANTED, HEAVY WROUGHT and CAST-IRON GUNS.—300 TONS KENTLEDGE IRON.  
100 TONS OLD RAILWAY SPRINGS.  
Address, stating price, &c., "A. C. 97," care of Henry Greenwood, Advertising Agent, Liverpool.

EMPLOYMENT WANTED by "S. WALES," whose business time is only partly engaged in SURVEYING MINERAL WORKINGS. Open to a PARTNERSHIP—management or otherwise. Good testimonials. Aged 30.  
Address, "S. Wales," MINING JOURNAL Office, 26, Fleet-street, London.

## TO COPPER SMELTERS, AND OTHERS.

AN OLD-ESTABLISHED HOUSE in BIRMINGHAM, whose business brings the partners into daily intercourse with the consumers of METALS, desires AGENCIES for the SALE of COPPER, TIN, TIN-PLATES, SPELTER, &c. The highest references will be given.  
Address, "A. B. C. D.," Post Office, Birmingham.

## METALLURGIE.

MINERAI de fer MANGANESIFERE de la compagnie FRATERNIDAD (Espagne).  
S'adresser à Paris, Boulevard du Temple, 35.

MANGANIFEROUS IRON ORE from the MINES of the FRATERNIDAD COMPANY OF SPAIN.  
Address, 35, Boulevard du Temple, Paris.

LOCOMOTIVE REQUIRED IMMEDIATELY, on redemption hire or for net cash; 4 ft. 6½ in. gauge, 16 in. cylinders; up to the duty of taking a load of 90 tons up a gradient of 1 in 32, and on a curve of 250 yards radius. Send price, specification, and when delivery can be had to "Colliery Proprietor," Post Office, Redland, Bristol.

## TO COLLIERY OWNERS, AND MINING COMPANIES.

FOR SALE, at MILFRAEN COLLIERY, BRYNMAWR, near TREDEGAR, a direct-acting PUMPING ENGINE, 28 in. cylinder, nearly new; also a 70 yard LIFT OF PUMPS, 11 in. diameter, with clack piece and bucket.—Apply to JOHN JAYNE, Brynmawr.

FOR SALE, a LEAD MINE in FLINTSHIRE, NORTH WALES. It has hitherto been worked as a private venture by two gentlemen. This is an excellent opportunity for anyone wishing to form a joint-stock company, as the property will bear the strictest investigation.  
For particulars, apply to Mr. RALPH ASHTON, 50, Piccadilly, Manchester.

FOR SALE.—A 70-in. condensing PUMPING-ENGINE, equal beam, 10-ft. stroke, equal to new, with a capstan, shears, and steel wire rope. Apply to W. MICKELL, 42, Cornhill, London, E.C.

FOR SALE, about TWO TONS of ½ inch WIRE ROPE, well adapted for MINING PURPOSES.  
For price, &c., apply to Mr. W. HOOPER, 20, Chapel-street, Tavistock.



## Notices to Correspondents.

\* Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be filed on receipt: it then forms an accumulating useful work of reference.

COAL IN DURHAM.—I see by the Journal of Sept. 21 that the lordship of Hart, with their valuable freehold estate and coal fields in the county of Durham, are to be sold by auction. Can any reader inform me, through the Journal, if coal beds exist south east from Ferryhill to Aycliffe, and to Stockton, all in the county of Durham? Limestone abounds in large quantities in the neighbourhood of Aycliffe.—R. S.: *Monksewearmouth, Sept. 30.*

OLD TREBURGETT.—As reports from our agent are so "few and far between," none having appeared since Sept. 7 last, may I ask if any of my fellow shareholders can inform me whether Old Treburgatt still exists?—F. A. B.

ROSEWELL HILL AND RANSON UNITED.—It is very desirable that an authenticated statement of our present position and prospects should be forwarded to you for publication. Many (it may be idle) rumours might be dispelled, and matters which do not appear exactly satisfactory could be explained. I trust the officials will see to this.—P. P.

RHYDTALOG AND EAST RHYDTALOG MINES.—Allow me through the Journal to enquire of my fellow-shareholders, whether there is not a necessity to have some enquiry into the working of these concerns, and endeavour to ascertain, if they are really worth working, whether some more energy could not be applied to them, as also the best means of setting about this desirable reform? The capital raised for developing the mines appears to be growing "beautifully less," without any apparent good result. One was promised many months ago, and the agent still reports that he is getting on with the dressing as fast as he can, but no ore comes to market. Would it not be well for the directors to consider if it be requisite to set for him some higher standard than himself, or get some one who may get on faster than he can?—P. G.

CWY YRON.—"A Shareholder" complains of the paucity of information as to their prospects, and considers that Capt. Kito should prepare a detailed statement as to the real position of the mine—or, that the proprietors should nominate an independent agent to do so.

Received.—"W. E." (Auckland): the letter referred to came safely to hand.—"O. W."—"P. G."—"T. A." (Philadelphia)—"W. P."—"J. M." (Glasgow)—"J. S. J."—"T. T." (St. Ives)—"Novice" (should consult the Broker through whom he bought the shares)—"W. U." (Rotherham).

## THE MINING JOURNAL,

Railway and Commercial Gazette.

LONDON, OCTOBER 5, 1872.

## THE COPPER TRADE.

During the quarter ending Sept. 30 the quantity of copper ore, the produce of Cornwall and Devonshire, sold at the Cornish Ticketing, was 16,483 tons, which contained 989 tons 12 cwt. fine copper, and realised 74,807/18s. 6d., being equal to an average of 4/10s. 8d. per ton of ore, and 75/12s. per ton of copper in the ore. During the same period the British, colonial, and foreign ores sold at Swansea amounted to 6901 tons, which contained 1188 tons 3 cwt. of fine copper, and realised 103,436/3s. 6d., being equal to an average of 15/ per ton of ore, and 87/1s. 2d. per ton of copper in the ore. The average produce of the ore sold at the Cornish Ticketings was 6 per cent., whilst that sold at Swansea gave an average produce of 17.3-16 per cent. From this it will be seen that the aggregate sales by ticket were 23,384 tons of ore, containing 2177 tons 15 cwt. of fine copper, and realising 178,244/2s. The subjoined is a summary of the periodical sales at the Cornish and Swansea Ticketings respectively.

The ores sold at the Cornish Ticketings were—

| Date.                              | Standard. | Prod. | Price. | Per unit. | Tons.     | Fine cop. | Amount.                |
|------------------------------------|-----------|-------|--------|-----------|-----------|-----------|------------------------|
| July 4...                          | £126      | 1 0   | 7      | £6 2 6    | 178,541   | 1707      | 124t. 5c. £10,807 11 6 |
| " 18...                            | 130       | 11 0  | 5 1/2  | 4 16 0    | 16 7      | 3778      | 218 15s. 18,167 14 0   |
| Aug. 1...                          | 125       | 2 0   | 6 1/2  | 4 12 6    | 15 8 1/2  | 1985      | 117 2s. 9,192 6 6      |
| " 22...                            | 122       | 8 0   | 5 1/2  | 4 5 6     | 14 10 1/2 | 4263      | 244 9s. 18,106 15 0    |
| Sept. 5...                         | 112       | 19 0  | 6 1/2  | 4 16 6    | 11 4      | 1123      | 75 8s. 5,427 9 6       |
| " 19...                            | 108       | 17 0  | 5 1/2  | 3 13 0    | 12 5      | 3567      | 209 13s. 13,016 2 0    |
| Total for the quarter              |           |       |        |           | 16,483    | 989       | 12s. £74,807 18 6      |
| Quarter ending June, 1872          |           |       |        |           | 17,206    | 940       | 3s. 92,372 18 6        |
| Quarter ending March, 1872         |           |       |        |           | 16,291    | 1017      | 10s. 80,703 13 0       |
| Quarter ending December, 1871      |           |       |        |           | 17,751    | 1165      | 7s. 75,752 18 6        |
| Total for the year                 |           |       |        |           | 66,731    | 4112      | 12s. £323,637 8 6      |
| Showing a quarterly average of     |           |       |        |           | 16,683    | 1028      | 3s. 80,909 7 2         |
| Corresponding quarter, Sept., 1871 |           |       |        |           | 17,295    | 1146      | 9s. 67,892 11 6        |

The ores sold at the Swansea Ticketings were—

| Date.                             | Standard. | Prod. | Price. | Per unit. | Tons.    | Fine cop. | Amount.                 |
|-----------------------------------|-----------|-------|--------|-----------|----------|-----------|-------------------------|
| July 23...                        | £115      | 15 6  | 16     | £14 10 4  | 18s. 7d. | 2106      | 336c. 19t. £31,573 11 0 |
| Aug. 20...                        | 109       | 2 9   | 18 1/2 | 16 4 0    | 17 6     | 2402      | 444 8s. 38,909 8 6      |
| Sept. 17...                       | 102       | 17 6  | 17     | 13 15 5   | 16 2     | 2393      | 406 16s. 32,953 4 0     |
| Total for the quarter             |           |       |        |           | 6901     | 1188      | 3s. £103,436 3 6        |
| Quarter ending June, 1872         |           |       |        |           | 7034     | 1200      | 8s. 116,683 6 6         |
| Quarter ending March, 1872        |           |       |        |           | 2456     | 435       | 1s. 39,487 16 6         |
| Quarter ending December, 1871     |           |       |        |           | 5475     | 943       | 13s. 67,492 13 6        |
| Total for the year                |           |       |        |           | 22,766   | 3767      | 8s. £327,100 0 0        |
| Showing a quarterly average of    |           |       |        |           | 5,691    | 941       | 16s. 81,775 0 0         |
| Corresponding quarter Sept., 1871 |           |       |        |           | 3,478    | 462       | 18s. 30,990 1 6         |

## RAILWAY IRON IN BRITISH AMERICA.

The demand for our railway iron in British America has moved on this year in a very encouraging fashion, the exports to Aug. 31 having amounted to 59,050 tons, as compared with 48,114 tons in the corresponding period of 1871, and 25,001 tons in the corresponding period of 1870. These totals were made up month by month as follows:—

| Month.   | 1870.  | 1871.  | 1872.  |
|----------|--------|--------|--------|
| January  | —      | 100    | 425    |
| February | 750    | —      | 1,712  |
| March    | 2,583  | 2,607  | 2,850  |
| April    | 5,371  | 5,929  | 5,255  |
| May      | 3,450  | 6,077  | 8,004  |
| June     | 3,495  | 12,569 | 10,052 |
| July     | 6,783  | 9,859  | 17,274 |
| August   | 2,589  | 10,978 | 13,478 |
| Total    | 25,001 | 48,114 | 59,050 |

The fact is, perhaps, not generally known, but it is a fact notwithstanding, that Canada has this year been our best external customer for railway iron. The United States have ranked first on the list, having taken 340,321 tons. Canada has come next, with 59,050 tons; Russia has ranked third, with 48,941 tons; and Germany fourth, with 28,525 tons. The satisfactory position which Canada occupies on the list is due—first, to the general progress of the Dominion in population and wealth; and, secondly, to the steady improvement which has been taking place of late in Canadian railway credit, after 10 or 12 years of severe depression. The consolidation of the scattered and disjointed British North American provinces into one compact Dominion has also stimulated Canadian colonisation, and has, of course, helped on, to some extent, the work of Canadian railway construction.

It is not difficult to divine the immediate cause of the great increase which is observable in the demand this year for our railway iron in Canada. The navy is busily at work in most parts of the Dominion, and hence there is a brisk consumption of rails. The Intercolonial Railway is marching steadily on to completion; the Great Western of Canada is proceeding with its air-line; the Canada Southern is to be completed in a few months; the Midland of Canada is being prolonged to Georgian Bay; the Grand Trunk of Canada is perfecting and improving, and even slightly extending its system; the same may be said of the Northern of Canada; and account must also be taken of new lines, such as the Toronto, Grey, and Bruce, the Wellington, Grey, and Bruce, the Lake Shore, &c. It will be seen that up to the close of August, this year, Canada had taken our railway iron to the extent of 59,050 tons, and the figures for September, October, and November will have to be added to this total (December does not count for much in connection with Canadian imports), so that it appears probable that the consumption of our railway iron this year in British America will be somewhere about 80,000 or 85,000 tons. Certainly, this total appears a small one when contrasted with that representing the exports to the United

States; but still Canada is even now an outlet not at all to be despised by the British iron trade, while the Canadian demand seems likely to increase rather than otherwise in future years, since Canada is still only scantily supplied with railway communication. For the present, at any rate, great activity is being displayed in the work of Canadian railway development. For instance, Mr. HULBERT, lessee of the Quebec and Gosport Railway, has taken a sub-contract to grade 40 miles of the North Shore Railway from Quebec, to be ready for the rails by the spring of next year. Then, it appears, that track-laying on the Canada air-line was completed from Glencoe to St. Thomas in September. The first sod of the Kingston and Pembroke Railway has been turned by the Mayor of Kingston, who appears to have supported the enterprise very heartily, as evidenced by his jocular but appropriate remark, that it gave him great pleasure to wheel the first sod, but instead of the traditional sod he would make it a barrowful. The Kingston and Pembroke, it may be added, will be 148 miles in length, and the contractors are Messrs. PHELPS and Co., of Watertown. We have said that the Grand Trunk of Canada is perfecting and improving its system, and at a recent luncheon at Toronto, attended by Mr. POTTER, the chairman of the company, it was stated that a contract had been entered into for no less than 43,000 tons of steel rails. It was further announced that out of 10,000 tons of steel rails only 8 tons gave way during the first month in which they were laid, while no less than 3500 tons gave way in a proportionate quantity of iron rails. Mr. POTTER made a distinct promise at the luncheon that the directors would re-lay the Grand Trunk system, or at any rate the main line, with steel rails, and provide additional sidings, warehouse, and station accommodation. The example of the Grand Trunk in the matter of steel rails will, no doubt, not be lost upon other Canadian railway companies. Hitherto the rail question has been one of the great difficulties with which Canadian railway managers have had to deal, in consequence of the trying nature of the Canadian climate. As steel rails are found to resist the climate, the work of Canadian railway maintenance will be much simplified and facilitated, and this will, of course, encourage the construction of Canadian railways.

## THE HEATING POWER OF IRISH COAL.

The importance of developing the coal fields of Ireland, and the excellent opportunity for enterprise in that direction afforded by the present position of the coal trade in England, has several times been pointed out in the *Mining Journal*; it is, therefore, particularly gratifying to find that the investigation of the heating power of Irish coal has been undertaken by so competent an authority as Professor ROBERT GALLOWAY, of the Royal College of Science for Ireland; and the results which he has obtained, together with the interesting account of the Irish coal fields by Mr. KINAHAN, of the Geological Survey of Ireland, should suffice to prevent any further delay in procuring the necessary capital for placing coal mining amongst the most profitable of Irish industries. The determinations and the proximate analyses of the coals were made in the College laboratory as part of the practical chemical course; so that, although several of the laboratory students have had the honour of actually making the determinations, everything has been done under the immediate direction and supervision of Prof. GALLOWAY, and therefore, their accuracy cannot be for a moment doubted. The evaporation tests were in every case commenced with the water at the temperature of 100° Cent. (boiling water point), and the results obtained with the several coals tested were—

| ANTRIM COAL FIELD.                        | Per lb. | Evaporation. |
|---|---------|--------------|
| Ballycastle, West, Main (4ft. 6 in.) Seam | 13.29   | 1058 lbs.    |
| TEMPERARY CO. FIELD.                      |         |              |
| Coalbrook Colliery                        | 7.29    | 768.2        |
| CONNAUGHT COAL FIELD.                     |         |              |
| Seltannaskengh, Arigna Valley, Third Seam | 13.47   | 1246         |
| Ditto, coke from unwashed culm            | 6.51    | 769.35       |
| Gubarruda, Arigna Valley, Third Seam      | 12.29   | 1193         |
| Lough Allen (Arigna) district, coal from  | 12.65   | 1082.37      |
| OTHER COAL FIELDS.                        |         |              |
| Lisnacore, KATHUK, Cork, Fourpenny Vein   | 9.9     | 872.44       |
| Jarrow anthracite, Castlecomer, Kilkenny  | 8.55    | 823.45       |

These figures are the more valuable because they are the first that have been published on the subject. Hitherto the statements as to the heating power of Irish coal have been merely general, so that there has been no means of ascertaining the relative value of English and Irish coal. That the coal is of a readily marketable quality is now beyond question, for even when the evaporating power is lower than that of the better kinds of English coal it would frequently happen that, owing to the difference in price, it would in Irish manufactures be more economic to use native than imported coal. In making the investigation Mr. GALLOWAY has performed a very important service, and one which will not fail to be appreciated by all desirous of seeing the development of the industrial resources of Ireland.

## COAL-CUTTING BY MACHINERY—THE FIRTH PRIZES.

The enquiry whether every competitor for the FIRTH prize will be permitted to inspect the working face of coal on which the machine will have to work before the day of trial may be answered in the affirmative, and if "Coal Proprietor," whose communication was published in the Supplement to last week's Journal, or any other intending competitor, will apply to the secretary of the committee he may rest assured that no obstacle will be placed in his way which could prevent his machine being shown to the best advantage. Should he prefer to work his machines for a few days previous to the trial in the pit in which it will have to be worked the permission would undoubtedly be granted for him to do so; or if so-called "neutral ground" can be suggested for the trials to take place in, the suggestion would in all probability be accepted, the committee, in whom full power is vested, being most anxious that perfect justice shall be secured to every competitor.

The sole object of the premium being offered was, as we stated upon first referring to the subject, to ascertain which was really the best machine; and it should be recollected that the circumstance of the name of FIRTH being connected with so many patents relating to coal-cutting machinery is due to the fact that every inventor of machines of this class who has sought money and co-operation to facilitate the development of the invention has found Messrs. FIRTH most willing to provide both, their practical acquaintance with the requirements of the case often enabling them to suggest useful and important modifications before patenting the machines. Nor must it be supposed that it was from the machines alone that profit was looked for. Messrs. FIRTH well knew that the advantage of substituting machine for hand labour in cutting coal would be so enormous that if they were enabled to procure a really good machine it would compensate them for their outlay upon patenting and testing many unsuccessful inventions; and we opine that, quite regardless of what has been expended in this way, few would be more ready than they to throw aside all their own machines in order to adopt any invention proved to be of greater practical utility. It was, probably, some such feeling as this that induced the offer of the very handsome premium by Mr. W. FIRTH, the competition for which is now upon the eve of taking place.

The committee by which the adjudication will be made consists of twenty members (three being Government Inspectors of Mines, who have selected their colleagues from their own knowledge of them), and Mr. FIRTH has neither directly nor indirectly interfered with their proceedings. Not only has the selection been thus made quite independently of Mr. FIRTH, but we believe many of the committee are entirely unknown to him. We may add, moreover, that the committee at present appear to have acted throughout quite independently, as they certainly should have done, of Mr. FIRTH. At one of their early meetings it was suggested that the conditions required modification, but as these had been previously settled and published by Mr. FIRTH, their modification, of course, presented a difficulty; it was, however, ultimately agreed to adjourn, and to invite Mr. FIRTH to attend when they next met to discuss proposed alterations. At the meeting, which Mr. FIRTH attended, he expressed himself very strongly against any alterations, urging that a contract had been made with the public, and that, therefore, no changes should be introduced. But as it became apparent that strict adherence to his views might lead to secessions, Mr. FIRTH ultimately

agreed that the committee might deal with the points as they thought best, but he stated that his own very strong views on the matter were not at all altered, although he could not help feeling that the opinion of such a body of gentlemen as formed the committee was more likely to be right than his own; he wished, however, that it should be distinctly understood that not one single alteration emanated from him or was approved of by him.

The committee in this case merely acted as they have since done in all others—they sought to give every inventor a fair opportunity in the competition. There was no imputation that the conditions had been unfairly settled by Mr. FIRTH, but they felt that the modifications they proposed would be the means of admitting a larger number of competitors. The suggestion that the committee should give great consideration to the machine working with the least pressure is almost superfluous, as engineers are not in the habit of omitting a machine. The committee have, no doubt, got permission to have the trials made at the places best suited to secure justice to every competitor, and if they can arrange to have the trials in collieries so few eligible places that the field for trials is much more limited than is desirable. The committee appear to have used their utmost endeavour to ensure justice to all, and it may safely be concluded that misgivings as to the working powers of a machine are more likely to prevent it from being entered for competition than any doubt which can arise as to the impartiality of the committee.

Since the above remarks were written we have received the following communication, which we have much pleasure in publishing:—

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—I beg to hand you a list of the names of those gentlemen who have agreed to act on the committee for awarding Mr. FIRTH's prize of 500/ for the best coal-cutting machine, and I shall feel much obliged if you will give it insertion in your next issue.

JOHN E. MAMMATT,

Hon. Sec. to the Committee.

Wortley Grange, Leeds, Oct. 2.

THOS. EVANS, Esq., H. M. Inspector of Mines, Belper.  
F. N. WARDELL, Esq., H. M. Inspector of Mines, Wath-upon-Deane.  
JAMES WILLIS, Esq., H. M. Inspector of Mines, Durham.  
JOHN DAGLISH, Esq., Tyne-mouth.  
LINDSAY WOOD, Esq., Hutton Hall, Fence Houses.  
G. B. FORSTER, Esq., Backworth, Newcastle-on-Tyne.  
G. C. GREENWELL, Esq., Poynton, Stockport.  
T. W. ENBLETON, Esq., Methley, Leeds.  
A. L. STEVENSON, Esq., Holywell Hall, Durham.  
GEO. MAY, Esq., North Hutton Collieries, Fence Houses.  
R. C. WEBSTER, Esq., Raabon, North Wales.  
THOS. CARRINGTON, Esq., Kiveton Park Colliery, Sheffield.  
JOHN BROWN, Esq., Cannock Chase Collieries, Walsall.  
S. G. WARDELL, Esq., Doe Hill House, Alfreton.  
JOHN JACKSON, Esq., Clay Cross Collieries, Chesterfield.  
W. P. MADDISON, Esq., Thornhill Lees Collieries, Dewsbury.  
THOS. GILLOTT, Esq., Farnley Ironworks, Leeds.  
THOS. R. GAINSFORD, Esq., Belle Vue, Sheffield.  
GEO. FOWLER, Esq., Basford Hall, Nottingham.

COLLIERS' WAGES IN LANCASHIRE.—Messrs. ANDREW KNOWLES and SON, the Bridgewater Trust, the Clifton and Kersley Coal Company, and other colliery proprietors in the Manchester district, have made another advance of 15 per cent. in the rate of wages paid to the miners in their employ. This, with the five previous advances made since the month of September last year, will make a total rise of 75 per cent. The public are generally of opinion that coal miners should be a well-paid class of men; considering the risks they have to run, and will now probably think they are well paid, as they can easily earn from 10s. to 15s. per day. It is remarkable, as showing the very general prosperity of the district, when it can be stated as a fact that this high standard has had very little effect in bringing new men into the mines.

THE MINERS' CONFERENCE.—The recent revival of industry has been wonderfully promotive of all such organisations. The rapidity with which this amalgamation has become as it now is, a representation of 70,000 men, is, perhaps, without precedent. Great power for good or for evil is implied in such an organisation. How the men who compose it will bear themselves and use their combination in a time of declining trade has yet to be seen. Very much will depend upon their leaders. Much more, we fear, upon the state of the funds of the amalgamation. At present these mean, in this case, a sum of between 4000/ and 5000/. Mr. HALLIDAY holds that the colliers have generally a claim to a considerable advance upon what they are now receiving; but he does not see his way to recommending an attempt to get it until the money at the disposal of the district to aid strikers is larger than now. Whilst it is plain that the colliers, the country through, are immensely better off than ever they were, still it is plain from what has taken place at Walsall that "a paradise of a place," and 7s. a day, is not enough to satisfy some of the men. This would seem to be the lot of the West Cumberland men; yet they want, and believe they shall get, another 30 per cent. Most heartily we hope that trade will remain in a condition that will justify their masters in giving them such a further rise, but we cannot say that the prospects are in their favour. And no organisation will be sufficiently powerful to compel employers to be independent of the market. It is only trite to say that there is a point beyond which masters and men cannot go without ruin in the demands that they make on the consuming public, upon which both are altogether dependent. The best of the men know this full well. Let us hope that they will have wisdom and courage enough to act upon it.

COAL AND IRON IN THE UNITED STATES.—The Marquette and Ontonagon and the Houghton and Ontonagon Railway Companies have been consolidated under the title of the Marquette, Houghton, and Ontonagon Railroad. A committee has been appointed to consider the establishment of a line of steam barges to run in connection with the road, taking the ore from the mines and delivering it at its port of destination with a certain degree of regularity. It is hoped that something may be done to facilitate the transport of ores from the district. The present prospect of affairs is that a demand for not less than 1,500,000 tons of ore, and possibly more, will arise next year. According to present appearances, not more than 1,000,000 tons will be shipped this year. A new locomotive, named the "Anthracite," which has been placed on the Albany and Susquehanna Railroad, has six driving wheels, and carries its water above the boiler, thus dispensing with a tender. The firing apparatus is stated to be so arranged that the fires last all day without replenishing. The total production of all kinds of coal in Pennsylvania to Aug. 31 this year was 14,542,255 tons, against 10,109,881 tons in the same period of 1871, showing an increase of 4,432,374 tons this year.

NEW SQUEEZER FOR PUDDLED BALLS.—One of the most ingenious mechanical engineers north of the Tweed—Mr. JAMES ROBERTSON, Glasgow—has lately devised a machine for squeezing puddled balls. The first machine constructed according to Mr. ROBERTSON's plans is now in hand, and is intended for Messrs. BOLCKOW, VAUGHAN, and Co., Middlesborough. A small model of the machine was privately exhibited at Middlesborough a few months ago by the inventor; and it was announced that a paper would be read on the subject at the late meeting of the Iron and Steel Institute in Glasgow. The announcement was made, however, without Mr. ROBERTSON's knowledge or consent; and to the disappointment of many of the members, no paper was forthcoming on the subject. But Mr. EDW. WILLIAMS, of BOLCKOW, VAUGHAN, and Co., and Mr. MENELAUS, of the Downla Works, availed themselves, when visiting Glasgow on the occasion referred to, of the opportunity of interviewing Mr. ROBERTSON, and the result of the interview was that each of those gentlemen ordered a machine, the construction of that for Downla is to be deferred, so that any improvements that might suggest themselves from the use of the machine now in hand might be embodied in it. The machine is exceedingly simple, but it is as effective as it is simple. It consists essentially of two truncated cones, the surfaces of which are



**EXPLOSIVE GASES IN COAL MINES.**—Mr. E. H. Pickburn makes the very extraordinary statement that coal mines do not give off explosive gases at hydrogen, and that this hydrogen, when mixed with air, becomes "carburetted hydrogen." Now, I take it that he who would teach others should first learn his own lesson. This, Mr. Pickburn, though "a chemist" has failed to do. Coal mines evolve light carburetted hydrogen, which is an inflammable gas; and, with a mixture of from 1 to 14 volumes of air, this light carburetted hydrogen becomes the explosive "fire-damp" of the miner. There is no [free] hydrogen what-so-ever "free gas" in coal mines; it is all in the form of inflammable compounds with hydrogen form carburetted-hydrogen. The most explosive mixture of fire-damp is one of carburetted hydrogen with seven or eight volumes of air.—J. BEVERLEY FENBY, C.E., Birmingham.

In reply to J. Beverley Fenby, C.E., I beg to inform him that the light carburetted hydrogen, "as he names it," which evolves from the coal mine, is not an ex-



| BLACK TIN. |           |                |               |           |               |   |
|------------|-----------|----------------|---------------|-----------|---------------|---|
| Date.      | Mine.     | Tons c. q. lb. | Price p. ton. | Amount.   | Purchasers.   |   |
| Sept. 23   | Wheal Uny | 14 7 2 9       | 457 10 10     | \$1238 15 | 2—Redruth Co. | W |



# IMPORTANT SALE OF FREEHOLD ESTATES AND COAL FIELDS, IN THE COUNTY OF DURHAM.

**TO BE SOLD, BY AUCTION, at the Queen's Head Hotel, Pilgrin-street and Grey-street, Newcastle-on-Tyne, on Wednesday, the 30th day of October, at One o'clock in the afternoon, unless previously disposed of by private contract—(MR. SAMUEL DONKIN, Auctioneer)—the following**

## VALUABLE AND EXTENSIVE FREEHOLD ESTATES,

In the following Lots, viz.:-  
**Lot 1.—THE LORDSHIP OF HART**, containing an area of about 3800 acres, in the townships of Hart, Stranton, and Throston, comprising several excellent farms, and a large extent of building land, adapted for residential, manufacturing, and commercial purposes, adjoining the towns and port of the Hartlepool, together with several properties in the town of Hartlepool, and ground rents arising from building sites which have been disposed of (and utilised) on building leases; also, several cottages in the village of Hart, with other properties. The Hartlepool, and Sunderland Railways, and the New Hartlepool Branches of the North-Eastern Railway pass through the estate; and a private railway, communicating with the North-Eastern System, is also laid into the estate, near the West Hartlepool Docks and Timber Ponds.

**Lot 2.—THE FARM OF HUTTON HENRY**, containing 345 A. 0 R. 38 P., in the township of Hutton Henry, and parish of Monk Hesleden, containing about 700 acres of land, in a ring fence, and all the beds of COAL and other MINERALS thereunder. If not sold as an entire property, the minerals will be reserved by the vendor, and the land will be sold in three lots, as under, viz.:-

**Lot 2.—THE FARM OF HUTTON HENRY**, containing 345 A. 0 R. 38 P., in the township of Hutton Henry, at the low rent of £300 per annum. This farm is held on a lease for twelve years, from the 13th May, 1871, with the option reserved to the owner of determining the lease in any year by giving the usual notice, and paying the tenant for improvements.

**Lot 3.—THE FARMS OF RODED RIDGE AND RODED RIDGE MOOR**, containing 309 A. 0 R. 33 P., in the township of Mr. John Berkin, at the annual rent of £210. These farms, which are capable of great improvement, are let on leases, which expire, as to the former on the 13th May, 1889, and as to the latter on the 13th May, 1874; but that the landlord has the option of determining the tenancy in any year, as in Lot 2. Also, the **BRICKFIELD** at Wingate, containing 19 A. 0 R. 38 P., let on lease to Mr. Birken for 12 years, from the 23d November, 1861, at a minimum rent of £10 a year, and a royalty of 2s. per thousand on bricks and tiles sold.

**Lot 4.—The dwelling-house, garden, and pleasure ground**, called **RODRIDGE HOUSE**, containing 2 A. 3 R. 31 P., in the township of Mr. Joseph Lugg, on a lease for ten years, expiring 13th May, 1875, at a rent of £20 10s. per annum. The Hutton Henry estate forms part of the Great Durham coal field, and has direct communication by railway with the ports of Hartlepool and Sunderland and the railway Company for the construction of a railway through this estate, Eastern Railway Company for the district with Stockton and Middlesbrough. Wingate Station, on the Hartlepool and Ferry-hill Branch, is on the estate, and the station at Castle Eden is within a short distance.

**Lot 5.—THE HURWORTH ESTATE**, in the township of Wingate and parish of Killoe, consisting of the following farms, viz.:-**BLACK HURWORTH FARM**, containing 230 A. 3 R. 12 P., an excellent land, in the occupation of Mr. James Barker, at the yearly rent of £137; and **RED HURWORTH FARM**, containing 190 A. 0 R. 25 P., in the occupation of Mr. John Hutton, at the yearly rent of £94. Together with 25 P. in the beds of COAL and other MINERALS lying thereunder. This estate is only about a mile and a half from the Wingate Station of the North-Eastern Railway, and an Act has been obtained for the construction of a railway through the estate from the colliery district near Castle Eden to Stockton and Middlesbrough.

**N.B.—All the farms on the several estates are let subject to a month's notice from the landlord, for the re-possession of any portions of them which may be required for railway building, or other purposes.**

**Lot 6.—The COAL and other MINERALS under the Hardwick Hall Estate**, in the parish of Monk Hesleden, containing about 770 acres, lying within a short distance of the Castle Eden Station on the Hartlepool and Sunderland Railway. For plans and particulars apply to Messrs. HORN and MURRAY, Solicitors, 22, King-street, St. James's, London; J. P. DAVIS, Esq., Solicitor, 15, Clifford-street, London; Messrs. NICHOLSON, SANDERS, and NICHOLSON, Solicitors, Walthamstow, near Rotherham; G. M. SAUNDERS, Esq., Solicitor, Carlton-chambers, 8, Regent-street, London; T. S. CUNY, Esq., Land Agent, Wetherby, Yorkshire; G. W. ALLANSON, Esq., Hart Estate Office, Hartlepool; and Messrs. MARTIN and FENWICK, Estate Agents, Park-place, Leeds.

## TO COLLIERY OWNERS, IRONMASTERS, AND OTHERS. IMPORTANT SALE OF FREEHOLD FARM, AND FREEHOLD AND LEASEHOLD COLLIERIES, AT NEVILLE HILL, NEAR LEEDS.

In the month of October inst., unless previously disposed of by private contract, **ALL that MESSAGE or TENEMENT, with the TWO COTTAGES, STABLES, and OUTBUILDINGS** thereunto belonging, situate in the township of TEMPLENEWSAM, in the borough of LEEDS, together with the several CLOSES of LAND adjoining thereto, containing together 28 A. 1 R. 18 P., more or less, and known by the name of **NEVILLE HILL FARM, or GREEN FARM**, together with so much of the several beds of coal lying beneath the same as remains ungot, and which are believed to be as hereinafter stated.

The whole of these premises are freehold, and immediate possession can be given both of the surface and of the mines.

Also, all the MINES and MINERALS under certain parcels of land, containing 5 A. 2 R. 23 P., or thereabouts, purchased by the Leeds and Selby Railway Company; subject to all such restrictions and conditions respecting mines and other matters as are contained in the several Acts of Parliament relating to the Leeds and Selby Railway.

Also, all the MINES and MINERALS under certain other parcels of LAND, containing 10 acres, heretofore part of the said farm, purchased by the North-Eastern Railway Company, subject to certain covenants, restrictions, and stipulations contained in the conveyance of the said last-mentioned parcels of land from the present vendors to the said North-Eastern Railway Company. About 15½ acres of the Black Bed and ironstone beneath this farm are ungot, and the Better Bed and fire-clay beneath the whole, 43 A. 1 R. 11 P., are also ungot.

Also, all those BEDS of COAL, called the Rock or Crow Bed and the Black Bed, with the ironstone between them, lying under certain portions of the estate called the Ivy House Estate, containing together 106 A. 1 R. 9 P., or thereabouts, situate in the townships of Leeds and Templenewsam, with the option of getting the partially wrought coal under so much of the said estate as lies on the upper side of a throw, supposed to pass through the said estate, and also through certain pieces, closes, or parcels of land, part of the said surface land, containing together 13 A. 3 R. 17 P., or thereabouts, and which said beds of coal and ironstone are held under a lease for 21 years from the 1st day of February, 1857. Under these lands about 65 acres of the Rock or Crow Bed and 72 acres of the Black Bed and ironstone are ungot. The lessees have power to sink shafts and form colliery works upon certain adjoining lands of the lessor.

And also all those THREE several BEDS or SEAMS of COAL, called or known by the several names of the Crow Coal or Rock Bed, the Black Bed, and the Better Bed, and all that MINES of IRONSTONE, lying above and in the roof of the said Black Bed of Coal, all which said last-mentioned beds of coal and mine of ironstone are situate and lie within and under all the estate situate at the Bank, in the borough of Leeds aforesaid, called Coach House Farm, and contain by estimation 30 acres or thereabouts, which are held under a lease for 13½ years from the 1st day of January, 1864. About 19 acres of the Rock Bed and 27 acres of the Black Bed and ironstone under these lands are still ungot.

The purchaser is to take all the steam-engines, shafts, boilers, gins, and colliery plant on the colliery (whether fixed or movable), at a valuation to be made in the usual manner.

The vendors are under agreement with the Native Guano Company (Limited) for the sale of such shale to be gotten from the pit hills at the colliery as the company may require, at the price of 3d. per ton, and to allow the company the exclusive use of one of the steam-engines belonging to the vendors, for the rent of £100 per annum, which agreement will terminate on the 1st day of May next, but is renewable at the option of the said company for one year longer.

The vendors are also under an agreement with the Low Moor Company for the sale of iron ore. The property will be sold subject to these agreements.

For further particulars, apply to—  
**Messrs. BOND AND BARWICK, Solicitors, Leeds.**

## GEORGEHAM, NORTH DEVON. TO BE SOLD, BY PRIVATE CONTRACT, a VALUABLE ESTATE, known as BUCKLAND.

In the parish of GEORGEHAM, DEVON, midway and on the line of railway which is now being made between the towns of Barnstaple and Ilfracombe, containing about 181 acres, lying in the centre of a district abounding in iron ore, and which is now being extensively raised on the properties immediately adjoining on the north, east, and west sides, and the lodes are believed to pass under this property.

The estate is held by a tenant under a lease for 21 years, which expires at Lady-day, 1874, in which the minerals are excepted, but earlier possession may be had by arrangement with the tenant.

Price, and any further information, may be obtained on application to **Mr. GEORGE BROWN, Land Agent, Barnstaple.**

## Dated Barnstaple, July 17th, 1872. MINERALS IN THE WOODHALL ESTATE, PARISH OF BOWTHWELL, LANARKSHIRE, TO BE LET.

**1.—THE UNWROUGHT MINERALS** in that PART of the ESTATE called **LEGBRANCK**, lying to the south of the Edinburgh and Glasgow Road, containing about 500 acres, as formerly possessed by the Monkland Iron and Steel Company, on lease which expired at Whitsunday, 1870. Immediate entry can be given to this mineral field, which contains the **DRUMGRAY SEAMS**, and unwrought portions of others.

**2.—THE SEAMS of COAL, IRONSTONE, and FIRE-CLAY** in that PART of the ESTATE known as the **THANKERTON MINERAL FIELD**, together with the **COLLIERY HOUSES** connected therewith, all as presently possessed by the Monkland Iron and Steel Company, on lease expiring at Whitsunday, 1874, when entry will be given to an incoming tenant. The working of this mineral field is in full operation, and a tenant can, on entry, have the option (in right of the landlord) of taking over at a valuation the whole or any part of the machinery and utensils of every description necessary for carrying on the works.

The Estate of Woodhall is within ten miles of Glasgow, and is close to the Holytown Station of the Caledonian Railway Company and to the Monkland Canal, with which different collieries communicate by means of private branch railways through the estate. These mineral fields are also in the immediate neighbourhood of numerous and extensive ironworks.

The proprietors are ready to treat with parties who may wish to purchase any part of the land.

For particulars, apply to Messrs. M'CRAITH and STEVENSON, M.E., 138, West George-street, Glasgow; to CHARLES PEARSON, C.A., 128, George-street, Edinburgh; or to WILLIAM NEILSON, Factor on Woodhall, by Aldridge.

6th September, 1872.

## SHROPSHIRE. OLD PARK IRON COMPANY (LIMITED).

**MESSRS. BARBER and SON**, in conjunction with Messrs. JOSEPH COCKSEY and SON, are instructed by the Mortgagees to OFFER for SALE by AUCTION, at the Wrekin Hotel, Wellington (Salop), on Wednesday, the 9th day of October next, at Five o'clock in the afternoon (unless previously disposed of by Private Treaty, of which due notice will be given), and subject to conditions—the **LEASEHOLD MINES and ESTATE**, together with the **WORKS, MACHINERY, PLANT, STOCKS, TOOLS, and IMPLEMENTS** of the **OLD PARK IRON COMPANY (LIMITED)**, on the premises, at Old Park, near Wellington, Salop.

The Leasehold Estate comprises about 1280 acres of surface land, situated in the parishes of Dawley and Stretchley, in the county of Salop, and the whole of the ungotton measures of coal, ironstone, fire-clay, and other minerals thereunder, subject to reasonable royalties.

On the property there are four blast-furnaces, with the necessary plant, machinery, and connections. There is also a sufficient and valuable colliery plant for working the mines and minerals. Also a large and valuable forge and mill, comprising about 30 puddling furnaces, three metal helves, one 60 cwt. steam hammer, two large trains, 22 in. plate mill, 20 in. sheet mill, 10 in. and 8 in. merchant hoop and guide train; with mill heating and annealing furnaces, two sets of powerful guillotine, cutting down, cropping, and other shears; powerful driving gear, and all the other necessary engine and steam power for driving the same.

The estate is intersected by a locomotive railway and tramways for conveying the minerals and iron to and from the pits. Forge, and mill blast-furnaces, &c., and is in direct communication with the London and North Western and Great Western Railways.

The forge and mill have been erected within the last 10 years, regardless of expense, and are adapted to the manufacture of heavy descriptions of iron.

The ungotton mines of coal are estimated at 12,000,000 tons, and of ironstone at 1,200,000 tons.

The iron produced from the estate is well known in the market as being of the finest quality.

The property may be inspected by order, which may be obtained from the auctioneers.

Further particulars, with conditions of sale, will shortly be prepared.

The lease under which the property is held, and a copy of the working plans of the colliery, and a plan of the estate, may be inspected at the office of Mr. R. D. Newell, solicitor, Wellington, Salop, from whom, or from the auctioneers, Messrs. Barber and Son, Wellington, Salop, and Messrs. Joseph Cocksey and Son, West Bromwich, further particulars and conditions of sale may now be obtained.

## CARNARVONSHIRE, NORTH WALES. IMPORTANT TO CAPITALISTS, QUARRY PROPRIETORS, AND OTHERS.

**SALE of a LARGE SLATE QUARRY**, known as **CASTELL CIDWYM SLATE QUARRY**, situated near QUELLYN LAKE, on the road from CARNARVON to BEDDLEGERT.

**MR. WM. DEW WILL SELL, BY AUCTION**, at the Sportsman Hotel, Carnarvon, on Saturday, the 12th day of October, 1872, at Two o'clock in the afternoon (subject to conditions then and there to be produced),

**THE CASTELL CIDWYM SLATE QUARRY, Together with the WHOLE of the VALUABLE WORKING PLANT and MATERIAL.**

The quarry will be sold subject to a lease for 60 years, reserving to the vendors a royalty of 1-16th, and with a minimum rent of £50 per annum. It is situated about six miles from the town of Carnarvon, on the Beddgelert Road, and comprises an area of 43 A. 3 R. 7 P.

The slate beds are rich and of a superior quality. The face of the workings presents unmistakable proof of a first-class quality of marketable slate, the openings made satisfactorily prove the existence of a most superior vein, the rock has been developed to a considerable depth, and is now in a position to turn out 200 tons per month.

It has been extensively opened out at a large outlay, which fully bears out the fact that it forms part of the great vein running from the far-famed Penrhyn Quarries through the Llanberis Quarries to the Nantlle Vale.

It is furnished with good and efficient machinery, is well provided with tramways, 11 wagons, water-wheels, 3 weighing machines, smiths' tools, wire rope, iron rails, crane, barrows, &c., with plenty of water power, and every requisite for work.

Particulars and inventory of plant and machinery may be had at any of the principal hotels in North Wales; of W. LIPSCOMB, Esq., Beech Lawn Heath, Wakefield; and the Auctioneer, Wellfield House, Bangor.

**N.B.—The purchaser of the quarry can have the option of taking the present manager's house for the unexpired term of 57 years at a very low rental.**

**MR. HUMPHREY OWEN**, Agent at the Quarry, will show intending purchasers over the works.

## FLINTSHIRE. MESSRS. FREEMAN AND STRONG WILL SELL, BY AUCTION, at the Royal Oak Hotel, Flint, on Monday, the 14th day of October next, at one for Two o'clock precisely, subject to conditions, the following very desirable

**FREEHOLD MINING PROPERTIES,**

Situate in the parish of HOLYWELL, in the county of FLINT.

**LOT ONE.**  
**ALL the MINES of COAL and IRONSTONE**, and other MINES and MINERALS, now lying in or under about 44 acres, known as the **BAGILL TOP HILL COLLIERY.**

The coals are of excellent quality, and well adapted for steam-engine, smelting, house, and other purposes.

This colliery is within a few hundred yards of the Bagillt Wharf, on the River Dee, where coal and ironstone can be transmitted at a very moderate cost; it also adjoins the turnpike-road leading from Holywell to Flint, being about two miles distant from the former place, and about the same distance from the latter, thereby commanding an extensive home trade, both for house use and the very extensive lead smelting and manufacturing establishments of the district.

The Bagillt Station on the Chester and Holyhead Railway is within a few hundred yards of the colliery.

The value of this colliery will, it is expected, be very considerably enhanced by the mining operations now being extensively carried on in the adjoining lands on the deep of these mines.

**LOT TWO.**  
**ALL the MINES of COAL and IRONSTONE**, and other MINES and MINERALS in and under about 58 acres of land, known as the **CORNIST ESTATE**, situate within half a mile of the town of Flint, where there is a station on the Chester and Holyhead Railway, and within three quarters of a mile to the shipping place on the River Dee. There are also extensive manufacturing establishments in the neighbourhood.

The MINERALS under the dwelling-house known as Cornist Hall, and the outbuildings and gardens, containing about 2 acres 1 rood 36 perches, will not be sold, and will not form part of the 58 acres.

For further particulars apply to Mr. ISAAC TAYLOR, Land Agent, Colleshill Cottage, Flint; to Mr. THOMAS ROBERTS, Gadly's-road, Bagillt; or to Mr. RUPERT SMEDLEY, Solicitor, Holywell.

**TO RAILWAY CONTRACTORS, COLLIERY PROPRIETORS, IRON MERCHANTS, AND OTHERS.**

**HIGHLY IMPORTANT and EXTENSIVE SALE of CONTRACTORS' PLANT and MACHINERY, HORSES, HORSE GEARS, and OTHER EFFECTS.**

**MESSRS. CHURTON, ELPHICK, and CO.**, beg to announce that they have been favoured with instructions from Messrs. Scott and Edwards, to **SELL BY AUCTION** (in consequence of the completion of the Whitechurch and Tattenhall Railway) on **TUESDAY, the 15th day of October, 1872**, and following day if necessary, at the Depôts at Whitechurch and Hampton Heath, a large quantity of valuable

**PLANT, MACHINERY, and EFFECTS,**

Including about 200 tons of contractors' rails, first-class LOCOMOTIVE TANK ENGINE, &c., together with seven WAGON HORSES, harness mare, and a large quantity of excellent gears and harness, the greater part of which was made for these works.

**N.B.—Catalogues may be had at the offices of the Auctioneers, Chester; and Whitechurch (Salop).**

## PRELIMINARY. TO GAS AND COLLIERY COMPANIES, ENGINEERS, IRONFOUNDERS, BRICKMAKERS, AND OTHERS.

**MR. FREDERICK MILLS** is honoured with instructions to **SELL BY AUCTION**, during the present month October (unless previously disposed of by private treaty), **ALL the VALUABLE PLANT and MACHINERY of the LATE**

**PURIFIED FUEL COMPANY,**

**HENDON, near SUNDERLAND**, comprising the **FUEL PRESS MACHINE**, with four revolving tables and elevating apparatus; drying-stove fittings, with wrought-iron doors; 150 skeleton wagons, for running the compressed materials into them; a water balance hopper, and 2 cages; the cast-iron fittings of 50 coke-ovens, with binders, all complete; a drawing-machine for pushing and drawing out the coke, self-acting, with engine and boiler attached; gas condensers, and exhaust-pump for gas; 7 in. centrifugal pump, by Gwynne; pair of 18 in. cylinder horizontal engines; 2 Cornish boilers, 23 ft. by 6 in. diameter; over 1000 tons of wrought and cast metal; large quantities of single and double headed rails, nearly new; De Bugeue's girder riveting machine; pair of hydraulic water-engines, by Armstrong; shafting, gearing, steam and water pipes; and a miscellaneous assembly of other effects.

Full particulars in next week's advertisements and in catalogues, which may be shortly had from F. NORTON MILLER, Esq., 26, Fawcett-street, Sunderland; or of the Auctioneer, 17, St. Ann's-square, Manchester.

**STAFFORDSHIRE. IMPORTANT MINERAL ESTATE. PRELIMINARY ADVERTISEMENT.**

**MESSRS. CHESHIRE and GIBSON** will be instructed by the Proprietors to OFFER for SALE, BY PUBLIC AUCTION, in the month of October or November next (instead of September, as previously advertised), at a time and place to be named in future advertisements, a **VERY VALUABLE MINERAL PROPERTY**, consisting of about 290 acres of **FREEHOLD and COPYHOLD LANDS**, in **BILSTON, DARLSTON, and WILLENHALL**, in the county of STAFFORD, with the **UNWORKED COAL and IRONSTONE MINES** under the same, some portions of which are now the subject of extensive mining operations by Messrs. Bradley and Southan, Mr. Hawkins, Messrs. Samuel Groucutt and Sons, and others, and produce minerals and royalties amounting to nearly £3000 a year, and will be sold subject to, but with the benefit of, the existing mining leases and other tenancies.

Detailed particulars, with plans, will shortly be published. In the meantime, further information may be obtained of Mr. MARSHALL, Solicitor, Darlston; Mr. WOODCOCK, Land Agent, Wolverhampton; Mr. E. FROG, Bilston; or to the Auctioneers, 93, New-street, Birmingham.

## ROTHERHAM UNION. TO VALUERS.

**THE GUARDIANS** are desirous of RECEIVING TENDERS from

experienced and competent persons for VALUATIONS of—  
 1st, THE COLLIERIES,  
 2nd, MANUFACTORIES AND WORKS,  
 3rd, RAILWAYS AND CANALS.

Situate within the ROTHERHAM UNION.

Tenders may be for any one or more of the above three descriptions of property. Each tender must state the price at which such valuation will be made, separately for each class, and whether by percentage on rateable value or otherwise (also the charge per day for attending, if necessary, to support the valuation), also the time within which the valuation will be completed.

The guardians do not bind themselves to take the lowest tender. Tenders to be marked such, and sent to me on or before the 19th October next. By order, J. BARRAS, Union Clerk.

## TO IRONMASTERS AND CAPITALISTS.

**THE ADVERTISER (a MINING ENGINEER of Twenty Years' experience in the CLEVELAND IRONSTONE FIELD)** seeks for co-operation in OPENING OUT and WORKING about SEVEN HUNDRED ACRES of highly valuable royalty.

The main seam can be won by shafts about 50 feet in depth, and the property possesses advantages over many.

Those who are desirous of full particulars on application to "Mining Engineer," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

## TO CAPITALISTS, AND IRON SMELTERS.

**FOR SALE, the LEASE or SETT of a HEMATITE IRON MINE**, unlimited in quantity, capable of returning from 2000 to 5000 tons of ore per month, found by smelters at present using it to be 45 per cent. metallic iron, free from sulphur and phosphorus.

The total cost, including royalty, raising, haulage to port, and freight to Newport in Wales, not exceeding 9s. per ton.

About 4000 tons of ore are now ready for shipment, and as an iron mine or iron quarry the property is pronounced by competent authority to be unrivalled.

Apply, by letter, to "H. and Co.," care of the Editor of the MINING JOURNAL, 26, Fleet-street, London.

## TO IRONMASTERS, &c.

**TO BE DISPOSED OF, the LEASE, for 42 years, of a VALUABLE IRONSTONE ROYALTY**, in the heart of the CLEVELAND DISTRICT, with shafts sunk, and the stone opened out, and ready for immediate realisation—being within 20 yards of the main line of rails to Middlesbrough; its position and instant profitable working is unquestionable.

Apply to Mr. WATSON, 15, Fenwick-street, Liverpool.

## COAL MINES IN SPAIN.

**COMPANIA HULLERA-FERRIL DE CASTILLA Y NAVARRA.** This company owns FIVE MINES of MINERAL COAL, situated in the commons of the villages named PREJANO and TURUNCUN, in the province of LOGRONO.

The property consists of NINETEEN ALLOTMENTS, measuring 150,000 square metres each superficially, amounting together to 2,850,000 square metres.

The company offers either to **SELL the MINES** at a given price, or to **TRANSFER the WORKING** of them to another party who will pay a royalty per ton.

In order to be acquainted with the advantageous position of these mines, it is enough to say that they are at 38 kilometres from Tudela, by a well-kept wagon-road, at 22 kilometres from the station of Calahorra, on the Tudela and Bilbao Railroad, and at 30 kilometres from Castejon, on the junction of both lines, Tudela and Bilbao and Zaragoza and Olasuna.

The individual or company willing to buy or to undertake the working of these mines may address himself to Messrs. VIUDA DE RIBED E HIJOS, bankers, in Pamplona, who have the direction of the mines, and will give the orders to view them, and any information required.

For the Compania-Hullera, Ferril de Castilla y Navarra. Pamplona, September 16, 1872.

## CORBYN'S HALL IRONWORKS, near DUDLEY.

**TO BE SOLD, TWO POWERFUL and valuable CONDENSING BEAM ENGINES**, one working 6½ ft. stroke and one 7 feet, cylinders 44 in. diameter, with equilibrium valve, nozzles, and gearing; both engines complete, and in excellent condition.

**TWO SETS of HEAVY FORGE and MILL GEARING**, consisting of 16 feet driving wheels, a 15 feet and a 18 feet fly wheel, with spurs and other wheels to drive roll trams, massive wood framing, and cast sills.

A 20 inch FORGE TRAIN, comprising three lengths of rolls, pinions, holsters, bed-plate (42 feet long), &c., complete.

A 20 inch SHEET MILL TRAIN—viz., grain chills and grooved rolls, pinions, holsters, balances, bed-plate (42 feet long), &c., complete.

For particulars, apply to—  
**Mr. WM. BARLOW, Pennsett, near Dudley.**

## RARE OPPORTUNITY FOR MAKING A FORTUNE.

**TO BE SOLD, PART or ENTIRE (former preferred) of a COLLIERY ROYALTY in NORTH WALES**, bordering on the London and North-Western Railway, and close to a shipping port. There are several shafts partially sunk, some requiring to be sunk still deeper, but operations stopped for want of capital. There are four seams of good house and steam coal proved in an area upwards of 400 acres of surface. Holder will sell the entire, including the present plant (not sufficiently powerful for sinking further) for £4000, but would prefer taking a PARTNER, who would advance the necessary capital for half profit, which in the present state of the coal trade are almost fabulous.

Address, "Vulcan," care of Mr. Watson, 15, Fenwick-street, Liverpool.

**TO BE SOLD, BY PRIVATE TREATY, a 50 in. cylinder CORNISH PUMPING ENGINE**, with spring piston 11 ft. stroke inside and 10 ft. in the shaft, in good order, a little the worse for wear. Also, TWO 11 tons and ONE 9 tons CORNISH BOILERS, with 7 ft. diameter shells, tubes 3 ft. diameter. Open to a reasonable offer for the lot into trucks, or separately, as may be agreed on.

Applications to be made to "E. B.," Engineer, Mr. Sandford's, Stationer, High-street, Shrewsbury.

## STEAM ENGINE.

**TO BE SOLD, cheap, a GOOD 36 in. PUMPING ENGINE, 8 ft. stroke in shaft, 9 ft. in cylinder, with or without a 10 ton BOILER.** Also iron Rings for a 40-ft. WATER WHEEL and PITWORK of various sizes.

Apply to **GEORGE PROUT, Lumborn Foundry, Tavistock.**

**MINE MACHINERY for SALE, at COMBARTON, NORTH DEVON**, comprising powerful ENGINE and BOILER, 50 fms. PUMPS, small WATER-WHEEL and ORE CRUSHER, FOUR HEADS of STAMPS, &c.

The above is offered much under its value to an immediate purchaser, and, if desired, a renewal of the lease for working the mine may be obtained on advantageous terms.

The veins of silver-lead ore recently worked was for some time worth upwards of £100 per fathom.

Apply to Mr. T. FIDLER, Newbury.

## LEAD MINES IN THE COUNTIES OF DURHAM AND NORTHUMBERLAND.



**BICKFORD'S PATENT**  
FOR CONVEYING  
CHARGE IN**SAFETY FUSE,**  
FIRE TO THE  
BLASTING ROCKS, &c.

Obtained the PRIZE MEDALS at the "ROYAL EXHIBITION" of 1851; at the "INTERNATIONAL EXHIBITION" of 1862, in London; at the "IMPERIAL EXPOSITION," held in Paris, in 1855; at the "INTERNATIONAL EXHIBITION," in Dublin, 1865; at the "UNIVERSAL EXPOSITION," in Paris, 1867; and at the "GREAT INDUSTRIAL EXHIBITION," at Altona, in 1869.



**BICKFORD, SMITH, AND CO.,**  
OF TUCKINGMILL, CORNWALL, MANUFACTURERS AND ORIGINAL PATENTEES OF SAFETY-FUSE, having been informed that the name of their firm has been attached to fuse not of their manufacture, beg to call the attention of the trade and public to the following announcement—

EVERY COIL OF FUSE MANUFACTURED BY THEM HAS TWO SEPARATE THREADS PASSING THROUGH THE COLUMN OF GUNPOWDER, AND BICKFORD, SMITH, AND CO. CLAIM TWO SUCH SEPARATE THREADS AS THEIR TRADE MARK.

For Excellence  
and Practical Success  
of Engines



Represented by  
Model exhibited by  
this Firm.

**HARVEY AND CO.,**  
ENGINEERS AND GENERAL MERCHANTS,  
HAYLE, CORNWALL,  
HAYLE FOUNDRY WHARF, NINE ELMS, LONDON,  
AND 115, GRESHAM HOUSE, E.C.

MANUFACTURERS OF  
PUMPING AND OTHER LAND ENGINES AND MARINE STEAM ENGINES  
the largest kind in use, SUGAR MACHINERY, MILLWORK, MINING  
MACHINERY, AND MACHINERY IN GENERAL.  
SHIPBUILDERS IN WOOD AND IRON.

**SECONDHAND MINING MACHINERY FOR SALE,**  
IN FIRST-RATE CONDITION, AT MODERATE PRICES.  
PUMPING ENGINES; WINDING ENGINES; STAMPING ENGINES  
STEAM CAPSTANS; AND CRUSHERS of various sizes. BOILERS, PIT-  
WORK of all descriptions, and all kinds of MATERIALS required for  
MINING PURPOSES.

**THE PATENT PNEUMATIC STAMPS**  
May be SEEN AT WORK AT HAYLE FOUNDRY WHARF, NINE ELMS,  
by previous application at either of the above addresses.

BY  
LETTERS



ROYAL  
PATENT.

**THOS. BORLASE'S PATENT METALLIC**  
**ORE-DRESSING MACHINE.****ADVANTAGES.**

GREAT SIMPLICITY AND ECONOMY OF CONSTRUCTION and operation.  
The stuff is taken direct from the stamps.  
Nine-tenths of the tin or other mineral treated is saved at the first washing.  
The superintendence and attention required is the least possible.  
The motive power necessary is very trifling.  
LEAD ORE.—Four-fifths will be made fit for the market by one washing.  
TIN ORES.—Four-fifths are cleaned into whits with one washing.  
Dressing-floors can be laid out in shorter time and much more economically than  
with ordinary appliances.  
Upwards of five-sixths of the labour cost for dressing is saved.

**EXTRACTS FROM TESTIMONIALS.**

From Captain RICHARD BRIGHT, Cregbrowse and Penkevil United Mines, near  
Clawwater, February 19, 1872:—  
I have seen the tin-dressing machine at work at North Roskear Mine, and fearlessly  
say it is the best machine I ever saw. I do not hesitate to say it saves nine-tenths  
of the tin directly it passes over it, and eight-tenths of the tin is saved into whits  
at once.

From Capt. JOHN OLD, Breage, February 22, 1872:—  
I have inspected Borlase's patent revolving metallic ore-dressing machine at  
North Roskear Mine, and am pleased to say that I have a very high opinion of it  
as a complete separator. I tried the roughs and slimes after it left the separator,  
and found it to be very poor. This testing of the machine was very satisfactory to  
me, and I can with confidence recommend it.

From Capt. RICHARD PEARCE, Dolcoath, March 2, 1872:—  
I have seen your machine for dressing tin ore working at North Roskear, and am  
pleased with the simplicity of its working, and it seems to separate its work very well.

From Capt. ANTHONY JOHNS, North Roskear, March 4, 1872:—  
I have worked your dressing machine, and I find it will do its work as a separator  
and cleaner admirably. The whits for burning are very good, and the roughs  
which pass over it are very poor. I have great confidence in recommending it, as  
it saves much manual labour.

From Capt. JOHN REYNOLDS, Cook's Kitchen, March 4, 1872:—  
I called at North Roskear Mine to-day, and saw your new tin-dressing machine  
at work. I vanned the different divisions of roughs and slime as classified by  
the machine, and found them highly satisfactory. I believe it to be the foundation of  
a method for dressing tin which must, sooner or later, come into general use.

From Mr. F. PASCOE, tin dresser, Tuckingmill, March 4, 1872:—  
It will do for any class of work; for slimes it is first-class. It is equal to four  
times budding by passing over this machine once.

From Mr. S. H. STEPHENS, tin dresser, Great Wheel Fortune, March 5, 1872:—  
I have seen Mr. Borlase's patent machine in full operation at North Roskear  
Mine, and I willingly bear testimony to its efficiency for cleaning tin ores—in fact,  
it makes the best separation in one running I ever saw, either in this country or in  
America.

THE MACHINE CAN BE SEEN AT WORK AT NORTH ROSKEAR  
MINE, CAMBORNE, and all further particulars may be obtained on ap-  
plication to—

TUCKINGMILL FOUNDRY COMPANY,  
CAMBORNE, CORNWALL.

The SOLE MANUFACTURERS OF BORLASE'S IMPROVED PATENT PUL-  
VERISERS AND ORE DRESSING MACHINES, to whom all orders  
must be sent.

**CAPTAIN TREGAY'S**  
**IMPROVED PATENT**  
**STAMP COFFER,**  
FOR STAMPING GOLD QUARTZ, TIN, AND OTHER ORES.

The gateway is extended, discharge doubly increased, and power economised.  
May be inspected in full work, on application to Captain TREGAY, Redruth,  
Cornwall, who is PREPARED TO TREAT FOR GRANTING LICENSES for its use,  
or TO SUPPLY THE MACHINES.

**JOHN AND EDWIN WRIGHT,**  
PATENTEES.  
(ESTABLISHED 1770.)  
MANUFACTURERS OF EVERY DESCRIPTION OF  
IMPROVED

**PATENT FLAT AND ROUND WIRE ROPES**  
from the very best quality of charcoal iron and steel wire.  
**PATENT FLAT AND ROUND HEMP ROPES,**  
SHIPS' RIGGING, SIGNAL AND FENCING STRAND, LIGHTNING CON-  
DUCTORS, STEAM PLOUGH ROPES (made from Wedder and Horsfall's  
patent steel wire), HEMP, FLAX, ENGINE YARN, COTTON WASTE,  
TARPAULING, OIL SHEETS, BRATICE CLOTHS, &c.

UNIVERSE WORKS, MILLWALL, POPLAR, LONDON.  
UNIVERSE WORKS, GARRISON STREET, BIRMINGHAM.  
CITY OFFICE, No. 5, LEADENHALL STREET, LONDON, E.C.

WILTON'S MATHEMATICAL INSTRUMENT ESTABLISHMENT,  
REMOVED FROM St. Day to A. JEFFERY'S, CAMBORNE.

W. H. WILTON begs to thank his friends for their liberal support for so many  
years, and informs them that (having opened business at Valparaiso) he has now  
declined business in England in favour solely of Mr. A. JEFFERY, MATHEMA-  
TICAL INSTRUMENT MAKER, CAMBORNE, whom he considers (having been  
an assistant to his father for several years) is in every way capable of creditably  
maintaining the good name universally awarded to Wilton's instruments.

**A. JEFFERY**

Respectfully begs to inform Mine Managers, Surveyors, Engineers, &c., that  
having purchased Mr. Wilton's business, and the very valuable acquisitions and  
appliances belonging thereto, he has enlarged his Mathematical Instrument Ma-  
nufactory, and is prepared to supply THEODOLITES, DIALS, POCKET DIALS,  
LEVELS, TRAVELLING AND PLAIN PROTRACTORS, CASES OF DRAWING INSTRUMENTS,  
MEASURING CHAINS AND TAPES, ASSAYERS' SCALES AND WEIGHTS, EN-  
GINE COUNTERS, and, in short, every description of Instruments used in SURVEY-  
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Requiring in all its branches promptly attended to.

**LOCOMOTIVE TANK ENGINES**

FOR MAIN LINE TRAFFIC, SHORT LINES, COLLIERIES,  
CONTRACTORS, IRONWORKS, MANUFACTORIES, &c., from a superior  
specification, equal to their first-class Railway Engines, and specially adapted to  
sharp curves and heavy gradients, may always be had at a short notice from—  
MESSRS. BLACK, HAWTHORN, AND CO.,  
LOCOMOTIVE, MARINE, AND STATIONARY ENGINE WORKS,  
GATESHEAD-ON-TYNE.

**THE TAVISTOCK FOUNDRY, IRONWORKS,**  
**AND HAMMER MILLS,**  
ESTABLISHED MORE THAN HALF A CENTURY,

have been purchased by  
**NICHOLLS, MATHEWS, AND CO.,**  
Who are in a position to MANUFACTURE ALL KINDS OF ENGINEERING  
and FOUNDRY WORK, SHOVELS, and MINING TOOLS of every  
description; and have had a large experience in preparing  
MACHINERY FOR FOREIGN MINES,  
As well as selecting mechanics to erect the same.

N., M., AND CO. have always a STOCK OF SECOND HAND MATERIALS.

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WIRE WEAVERS,  
MINE SIEVE AND STAMPS' GRATE MANUFACTURERS,  
COPPER BOTTOM PERFORATORS,  
WORKS AT  
**COPPERHOUSE, HAYLE, CORNWALL.**

**ORE-DRESSING MACHINERY.**

SEPARATION TROMMELS.  
JIGGING MACHINES.—Continuous and automatic.  
CLASSIFIERS.  
SHAKING TABLES.  
BUDDLES.  
PERFORATED PLATES.—For Trommels, Jigging Sieves, and  
Stamps' Grates.  
SACH'S ROCK-DRILL.—As used at Altenberg, Commern, Saar-  
bruck, and Musen.

For particulars, apply to—  
MESSRS. KEMMER AND CO.  
CLARENDON GROVE, DRUMMOND STREET, N.W., LONDON.

**GIRDWOOD'S**  
**PATENT RECIPROCATING CRUSHER**  
Is the SIMPLEST and BEST PULVERISER in existence. It will do BETTER  
WORK, and MORE OF IT, on same power than any other yet invented.  
Apply for terms to GEORGE GREEN, Aberystwith; or to the patentee,  
ROBERT GIRDWOOD, Edinburgh.  
MAY BE SEEN AT WORK AT GREAT DARREN MINE, NEAR  
ABERYSTWITH.

BY HER MAJESTY'S



ROYAL LETTERS PATENT.

**STANLEY'S PATENT FURNACE,**  
**FOR SMELTING ORE OR RE-MELTING IRON OR OTHER METAL,**  
**PUDDLING AND ALL KINDS OF HEATING FURNACES.**  
**JOHN MARTIN STANLEY, PATENTEE & SOLE LICENSOR,**  
**SHEFFIELD.**

The advantages of these furnaces are, in the first place, they effect a saving of from 25 to 50 per cent. in fuel.  
2ndly, The use and expense of grate-bars are dispensed with, as these furnaces have closed fire-places, formed in brickwork.  
3rdly, They make from 80 to 90 per cent. less ashes than open fire-grate furnaces.  
4thly, They have a purer flame, the combustion is more complete, and contains less free or unmixed air or gases.  
5thly, The workmen have much less labour in working these furnaces.  
6thly, They heat quicker, and are more under the control of the furnace-men.  
7thly, They are not affected by the position of the wind or draughts.  
8thly, The mills and workshops are cooler and more comfortable than where the open fire-grate furnaces are used.  
For prices, and other information, apply to J. M. STANLEY, 27, Change-alley, Sheffield.

**FRANCIS MORTON & CO., LIMITED, LIVERPOOL,**  
Manufacture, in Galvanised and Corrugated Iron,  
**IRON ROOFS, IRON BUILDINGS, IRON SHEDS,**

Which they have extensively supplied and erected for mining requirements at home and abroad.  
ESTIMATES FURNISHED ON RECEIPT OF PARTICULARS.  
**F. M. & CO'S PATENT IRON ROOFING TILES OR SLATES ARE IN**  
**SPECIAL FAVOUR FOR TEMPORARY COVERING,**  
They require considerably less framework to carry them than ordinary slates or tiles.

ILLUSTRATED CATALOGUE ON APPLICATION.  
London Office, 36, PARLIAMENT STREET, S.W.

LONDON OFFICE:  
36, PARLIAMENT STREET, S.W.

**PATENT STEAM EARTH-BORING MACHINES**  
FOR  
**MINERAL EXPLORATIONS**  
**AND WATER SUPPLY,**  
Capable of BORING HOLES from 6 to 36 in. diameter, and to any  
depth to 2000 ft.

Price, and terms of hiring, may be obtained from the Patentees,—

**MATHER AND PLATT,**  
**SALFORD IRONWORKS, MANCHESTER,**  
MAKERS OF  
**LARGE PUMPS, PUMPING ENGINES, WINDING ENGINES, &c.**

**BENNETTS' SAFETY FUSE WORKS,**  
ROSKEAR, CAMBORNE, CORNWALL.  
**BLASTING FUSE FOR MINING AND ENGINEERING**  
**PURPOSES,**

Suitable for wet or dry ground, and effective in Tropical or Polar Climates.  
W. BENNETTS, having had many years' experience as chief engineer with  
Messrs. Bickford, Smith, and Co., is now enabled to offer Fuse of every variety of  
his own manufacture, of best quality, and at moderate prices.  
Price Lists and Sample Cards may be had on application at the above address.  
LONDON OFFICE,—H. HUGHES, Esq., 85, GRACECHURCH STREET.

**PROTECTED BY ROYAL LETTERS PATENT.**  
**BARKER'S IMPROVED FUEL**  
(FROM COAL DUST),  
SUITABLE FOR ALL PURPOSES FOR WHICH COAL IS USED.

This fuel, made from dust coal, gives in use results superior to the best coal; it  
is thoroughly water proof, stacks without liability to spontaneous combustion, low,  
or deterioration on board ship, or in any climate, and in 30 per cent. less space  
than coal.

An immense saving in effected by its use on sea-going steamers, owing to its high  
evaporative power, requiring one-third less stowage room, and avoiding all risk of  
spontaneous combustion. It burns with little smoke, forming itself into coke; it  
is very durable, the combustion is perfect, and it will not fall or disintegrate in  
great heat before a blast or strong draught, nor does it produce clinker.

It will bear rough usage and handling without breakage.

As regards the manufacture, it is easily and cheaply made; the machinery made  
is simple, effective, and comparatively inexpensive.

No heavy pressure is required, or exposure to heat after moulding, to dry or coke  
(as is usual); and after mixing, the blocks could, if desired, be made up by hand  
labour; but for large production, self-acting machinery is recommended; and when  
moulded, the fuel is at once ready for use or transit.

Works are in operation in London, and can be viewed on application.

Intending licensees can send their coal and have it made up into fuel in their own  
presence, and have it returned to them for trial.

Samples on a large scale suitable for every purpose supplied for trial.

The proprietors of the patents are prepared to grant licenses, and would, if desired,  
undertake contracts to provide machinery, erect works, and put the same into satis-  
factory operation, on any required scale of manufacture.

Application to be addressed to the patentees—

Mr. DAVID BARKER, Oldbury House, Northfleet, London; or  
Mr. THOS. D. CLARE, 13, St. Mary's Row, Birmingham.

**NATIONAL INSTITUTION FOR DISEASES OF THE SKIN,**

PHYSICIAN: DR. BARR MEADOWS, 40, DOVER STREET, W.

Patients attend at 227, Gray's Inn-road, King's Cross, on Mondays and Thurs-  
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at Ten; evenings from Six till Nine. Free to the necessitous poor; payment re-  
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**HIBBERT'S PATENT ANTISEPTIC,** for stamping out Small

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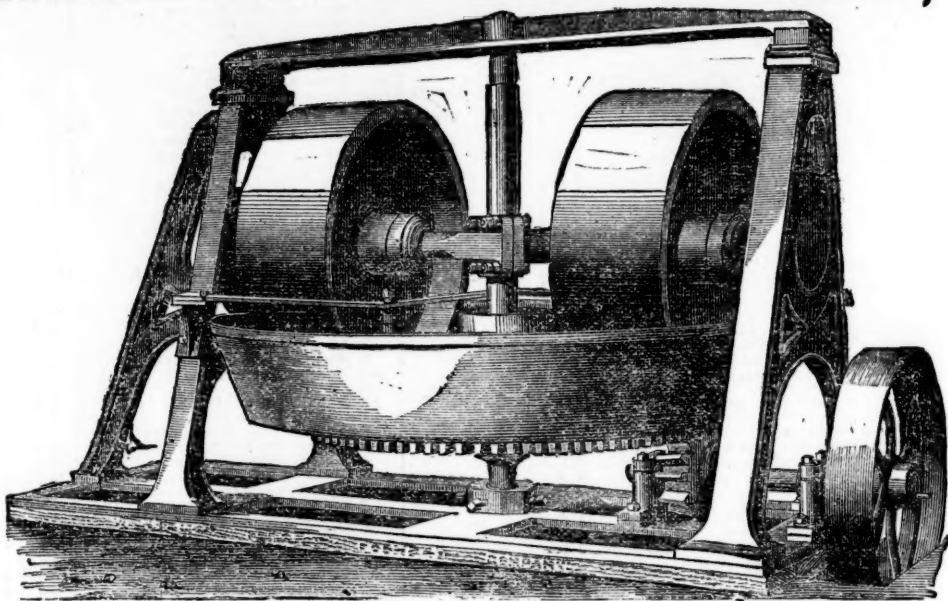
## THE HOWARD SAFETY BOILER,

HUNDREDS ARE NOW IN USE, AND THE DEMAND IS UNPRECEDENTED.

Some of its advantages:—  
NOT LIABLE TO DANGEROUS EXPLOSIONS.  
HIGH-PRESSURE STEAM, WITH ECONOMY OF FUEL.  
PERFECT CIRCULATION, AND READY MEANS OF REMOVING SEDIMENT.  
SAVING OF COST AND TIME IN REPAIRS.  
PORTABILITY, AND, FOR EXPORT, GREAT SAVING IN FREIGHT.

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## BARROWS & STEWART, ENGINEERS, MANUFACTURE PORTABLE STEAM ENGINES, WITH GEAR FOR WINDING, PUMPING, AND ORE CRUSHING, BUILDERS' AND CONTRACTORS' PLANT, &c.



### WORKS: BANBURY.

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## THE DON ECONOMIC LUBRICATING OIL IS 40 PER CENT. CHEAPER THAN THE ORDINARY KINDS.

Mr. ALFRED HEWLETT, of the Wigan Coal and Iron Company, says:—"I have used it for two years, and find it to answer exceedingly well for lubricating purposes."

Mr. NASMYTH, the Inventor of the Steam-Hammer, says:—"I am highly pleased with it as a most effective and durable lubricant, having remarkable properties in the way of setting free bearings which had got set fast."

In face of these and hundreds of other letters to the same effect, it is a MERE WASTE OF MONEY to use the dearer kinds for the engines and machinery of collieries and mines, numbers of which are now using the Don Oil instead.

Any company desirous of trying it before adopting it may do so at our risk and expense. Circulars containing particulars sent on application.

PRICE—By the Ton of 253 Gallons, 2s. 6d. a gallon; by the Cask of 40 Gallons, 2s. 9d.

AGENTS WANTED AT HOME AND ABROAD.

**DUNCAN BROTHERS,**  
MANAGERS,  
DON OIL COMPANY, 2, BLOMFIELD STREET, LONDON, E.C.

IRE TRAMWAYS

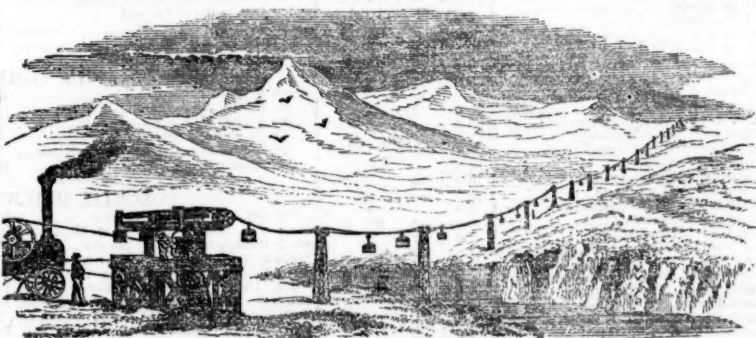
COST

clusive of power

and rolling-stock)

from £250 to £900

per mile,



For quantities

ranging from

10,000 to 100,000

tons per annum

and are at present successfully employed in lengths from a quarter of a mile to fourteen miles in transport of ironstone, fire-clay, coke, general mining produce, beetroot, sugar-cane, &c. They are working in most difficult and mountainous districts, where any other means of transport is impossible, as well as through ordinary country.

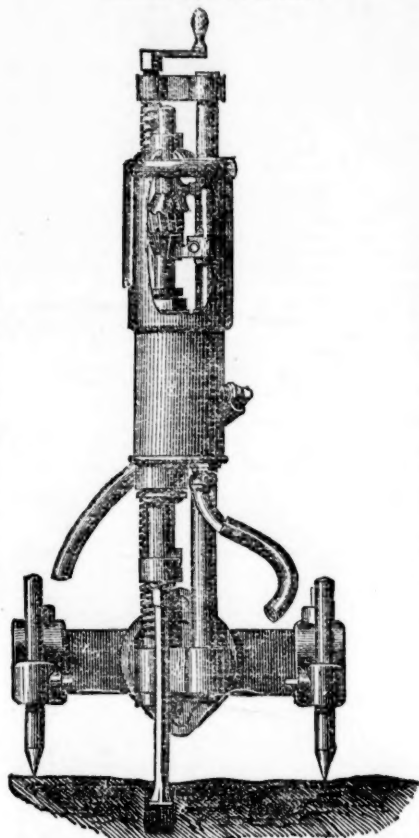
ABOUT SEVENTY LINES HAVE ALREADY BEEN CONSTRUCTED.

## THE WIRE TRAMWAY COMPANY (LIMITED)

PREPARED to SURVEY and ESTIMATE for LINES and EXECUTE CONTRACTS at HOME and ABROAD. They have engineers employed in constructing these lines in England, Holland, Prussia, Austria, Russia, Italy, Spain, United States, Peru, Chili, Brazil, India, Bolivia, West Indies, and Egypt. The system has been adopted by the English and Anglo-Indian Governments, Spanish and Prussian Governments, and for many of the first mines and ironworks at home and abroad.

WIRE TRAMWAY COMPANY (Limited), 21, Gresham-street, E.C.

**McKEAN'S ROCK DRILL,**  
FOR MINES, TUNNELS, QUARRIES, AND SUBMARINE WORK.  
500 TO 1000 STROKES PER MINUTE  
(counted by mechanism).  
PENETRATES GRANITE 6 TO 12 INCHES PER MINUTE.  
MACHINES WARRANTED.



One of McKEAN'S ROCK DRILLS may be seen working in Aberdeen granite from One to Four o'clock daily at 43, Borough-road, S.E., London.

For full description, &c., see "ENGINEERING" of July 26, 1872, and "MINING JOURNAL" of July 27, 1872.

These machines are manufactured for McKean and Co. by  
MESSRS. P. AND W. MACLELLAN, "CLUTHA IRONWORKS,"  
GLASGOW;  
MESSRS. VARRALL, ELWELL AND MIDDLETON, PARIS;  
AND E. REMINGTON AND SONS, NEW YORK.

SMALL PORTABLE BOILERS, or AIR COMPRESSORS, furnished, if required; the latter with GIFFARD'S FRICTIONLESS VALVE PISTON.

**McKEAN AND CO.,**  
ENGINEERS,  
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AND 5, RUE SCRIBE, PARIS.  
Circulars sent free.

N.B.—McKean and Co. are sole agents for M. GIFFARD'S FRICTIONLESS VALVE PISTON, for Pumps, Air Compressors, &c., giving a larger percentage of yield than any other system.

## INCREASED VALUE OF WATER POWER

The extraordinary advance in the price of coals has directed more attention to water power, and to the best manner of applying it. For many years it has been, to a great extent, neglected and undervalued. One great objection to it has been the variable nature of most streams in these countries, having abundance of water during the winter half-year, and very little in the dry season. No kind of wheel hitherto known was able to give the proper proportion of power from the smaller quantities of water, so that it became the practice very generally to use steam entirely during the summer half of the year, letting the water go to waste. This is now completely prevented, and the full available power can be obtained from a stream at every season by using

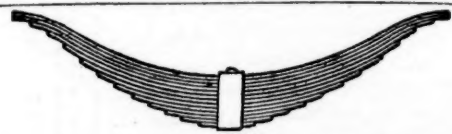
### MACADAM'S VARIABLE TURBINE.

This wheel (which is now largely in use in England, Scotland, and Ireland) is the only one yet invented which gives proportionate power from both large and small quantities of water. It can be made for using a large winter supply, and yet work with equal efficiency through all variations of quantity down to a fifth, or even less if required. It is easily coupled to a steam-engine, and, in this way, always assists it by whatever amount of power the water is capable of giving, and, therefore, saves so much fuel.

This turbine is applicable to all heights of fall. It works immersed in the tail-water, so that no part of the fall is lost, and the motion of the wheel is not affected by floods or back-water.

References to places where it is at work will be given on application to the makers.

**MACADAM BROTHERS & CO.,**  
ENGINEERS, BELFAST.



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Having purchased from the Trustee of the late Firm of W. Charles and Co. the extensive works, with the valuable and improved machinery, are prepared to execute orders for every description of

RAILWAY SPRINGS.

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**SPECIAL PAMPHLET ON NERVOUS DEBILITY.**—Read Debility, its Cause and Cure; on the Special Treatment of Nervous, Mental, and Physical Debility, Lowness of Spirits, Dimness of Sight, Indigestion, &c. Illustrated with cases. Gives rules for cure by the New Medicines. Dr. SMITH will, for the benefit of country patients, on receiving a description of their case, send a letter of advice GRATIS. Pamphlet free by post in an envelope on receipt of two stamps.—Dr. SMITH, 8, Burton-crescent, London, W.C.

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The most important fact that these alarming complaints may easily be removed WITHOUT MEDICINE is here clearly demonstrated, and the entirely new and highly successful treatment, as adopted by the author, fully explained, by means of which EVERYONE IS ENABLED TO CURE HIMSELF perfectly, and at the least possible cost.

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## THE MINING SHARE LIST.

| BRITISH DIVIDEND MINES. |   |          |          |               |             |            |            |  |  |
|-------------------------|---|----------|----------|---------------|-------------|------------|------------|--|--|
| Shares.                 | Mines.  | Paid.    | Last Pr. | Clos. Pr.     | Total divs. | Per share. | Last paid  |  |  |
| 1500                    | Alderley Edge, c, Cheshire*                     | 10 0 0   | —        | —             | 10 16 8     | 0 5 0      | Jan. 1872  |  |  |
| 20000                   | Blanc Caelan, s, Cardigan*                      | 1 0 0    | —        | —             | 0 3 0       | 0 0 0      | April 1872 |  |  |
| 18000                   | Boscawell Downs, t, c, St. Just*                | 3 0 0    | —        | —             | 0 5 6       | 0 0 0      | Oct. 1871  |  |  |
| 200                     | Buntallack, t, c, St. Just*                     | 100 5 0  | 150      | 140 150       | 619 15 0    | 2 0 0      | Aug. 1872  |  |  |
| 4000                    | Bronfloyd, s, Cardigan*                         | 91 0 0   | —        | —             | 110 0 0     | 2 0 0      | June 1872  |  |  |
| 6400                    | Brookwood, c, Buckfastleigh                     | 1 16 0   | —        | —             | 1 17 6      | 0 10 0     | Aug. 1872  |  |  |
| 4000                    | Cashwell, t, Cumberland*                        | 2 10 0   | —        | —             | 1 4 0       | 0 4 0      | Aug. 1872  |  |  |
| 6000                    | Castle-an-Dinas, t, St. Columb                  | 2 0 0    | —        | —             | 0 6 0       | 0 2 0      | July 1872  |  |  |
| 1000                    | Carn Brea, t, Illogan*                          | 35 0 0   | 100      | 155 160       | 297 0 0     | 4 0 0      | Sept. 1872 |  |  |
| 2450                    | Cook's Kitchen, c, Tavistock*                   | 19 14 9  | 31       | 29 31         | 10 14 6     | 1 0 0      | July 1872  |  |  |
| 10240                   | Devon Gt. Consols, c, Tavistock*                | 7 0 0    | —        | —             | 116 10 0    | 0 12 0     | May 1872   |  |  |
| 656                     | Ding Dong, t, Gwulva                            | 49 14 6  | —        | —             | 7 10 0      | 0 15 0     | Aug. 1872  |  |  |
| 4296                    | Dolcoath, c, t, Camborne                        | 10 14 10 | 75       | 70 75         | 97 1 8      | 1 17 6     | Aug. 1872  |  |  |
| 10000                   | East Baleswidden, t, Sancreed*                  | 1 0 0    | —        | —             | 14 17 0     | 0 0 0      | Aug. 1872  |  |  |
| 6144                    | East Caradon, c, St. Cleer*                     | 2 14 6   | 5        | 4 5           | 204 10 0    | 1 0 0      | Mar. 1872  |  |  |
| 6100                    | East Darren, t, Cardiganshire                   | 32 0 0   | —        | —             | 13 1 3      | 0 2 6      | Sept. 1872 |  |  |
| 2800                    | East Pool, t, c, Illogan*                       | 0 9 9    | 18       | 16 17         | 79 15 0     | 0 10 0     | Mar. 1872  |  |  |
| 5000                    | East Frank, t, c, Illogan*                      | 25 0 0   | —        | —             | 4 8 0       | 0 2 6      | Aug. 1870  |  |  |
| 3850                    | Gawton, c, Tavistock*                           | 3 18 6   | —        | —             | 0 13 0      | 0 5 0      | May 1872   |  |  |
| 40000                   | Glasgow Carr, c* (30,000 £1 p., 10,000 10s. p.) | 4 0 0    | —        | —             | 0 0 0       | 0 0 0      | Feb. 1872  |  |  |
| 15000                   | Great Laxey, t, Isle of Man*                    | 4 0 0    | 13 1/2   | 13 14         | 15 19 0     | 0 6 0      | Mar. 1872  |  |  |
| 5908                    | Great Wheal Vor, t, c, Helston*                 | 40 0 0   | —        | —             | 0 9 0       | 0 2 6      | June 1872  |  |  |
| 6400                    | Green Hurth, t, Cumberland*                     | 0 6 0    | —        | —             | 0 2 0       | 0 1 0      | Nov. 1870  |  |  |
| 10240                   | Gunnislake (Clitters), t, c                     | 4 19 0   | —        | —             | 0 2 0       | 0 1 0      | Nov. 1870  |  |  |
| 6000                    | Hingetford, t, near Liskeard                    | 8 10 0   | 22       | 17 20         | 61 10 0     | 1 10 0     | June 1872  |  |  |
| 25000                   | Killakee, t, c, Calstock*                       | 6 4 0    | —        | —             | 3 18 0      | 0 10 0     | Sept. 1872 |  |  |
| 400                     | Lisburne, t, Cardiganshire                      | 1 0 0    | —        | —             | 0 2 1 1/2   | 0 0 9 1/2  | Dec. 1870  |  |  |
| 2784                    | Lovell, t, Wendron                              | 18 15 0  | —        | —             | 343 10 0    | 2 0 0      | Mar. 1871  |  |  |
| 9000                    | Marke Valley, c, Cardigan*                      | 4 10 0   | —        | —             | 0 4 0       | 0 4 0      | July 1872  |  |  |
| 9000                    | Minera Mining Co., t, Wrexham*                  | 5 0 0    | —        | —             | 7 13 0      | 0 2 6      | July 1872  |  |  |
| 20000                   | Mineral Co. of Ireland, c, t, c                 | 7 0 0    | —        | —             | 61 3 8      | 0 16 0     | Aug. 1872  |  |  |
| 6400                    | New Pembroke, t, c, Par Station                 | 5 0 0    | —        | —             | 0 17 0      | 0 3 0      | July 1872  |  |  |
| 12000                   | North Lend, t, Wales                            | 2 10 0   | —        | —             | 0 5 0       | 0 2 6      | June 1872  |  |  |
| 5610                    | North Levent, t, c, St. Just                    | 10 12 0  | 17       | 15 17         | 4 13 0      | 0 12 0     | Sept. 1872 |  |  |
| 5694                    | Pedn-an-drea, t, Redruth                        | 3 11 3   | 1        | 1 1/2         | 0 5 6       | 0 1 6      | Nov. 1871  |  |  |
| 5000                    | Penhalls, t, St. Agnes                          | 8 2 0    | —        | —             | 0 5 0       | 0 5 0      | Nov. 1871  |  |  |
| 6000                    | Phoenix, t, c, Linkinhorne                      | 4 3 4    | —        | —             | 2 12 6      | 0 4 0      | July 1872  |  |  |
| 1772                    | Polverto, t, St. Agnes                          | 15 0 0   | —        | —             | 39 15 0     | 0 11 8     | July 1872  |  |  |
| 2000                    | Poldice, t, c, Gwennap                          | 10 0 0   | —        | —             | 1 7 6       | 0 10 0     | Dec. 1871  |  |  |
| 1120                    | Providence, t, Gwennap                          | 10 6 7   | 25       | 21 23         | 1 10 0      | 0 10 0     | Dec. 1871  |  |  |
| 15000                   | Queen, c, Calstock*                             | 0 10 0   | —        | —             | 104 12 6    | 0 10 0     | Sept. 1872 |  |  |
| 12000                   | Roman Gravel, t, Salop*                         | 7 10 0   | 18       | 16 1/2 17 1/2 | 0 2 0       | 0 2 0      | Sept. 1872 |  |  |
| 5869                    | Rosewell Hill and Ransom, t                     | 4 0 0    | —        | —             | 0 1 6       | 0 6 0      | Oct. 1872  |  |  |
| 10000                   | Shelton, t, c, St. Austell                      | 1 0 0    | —        | —             | 0 14 6      | 0 1 6      | June 1871  |  |  |
| 512                     | South Caradon, c, St. Cleer                     | 1 5 0    | 220      | 200 220       | 0 1 0       | 0 1 0      | Feb. 1872  |  |  |
| 5000                    | South Carr Brea, c, t, Illogan                  | 1 11 6   | —        | —             | 0 10 0      | 0 6 0      | Sept. 1872 |  |  |
| 6000                    | South Darren, t, Cardigan*                      | 3 6 6    | —        | —             | 0 10 0      | 0 2 6      | July 1872  |  |  |
| 242                     | Spearhead, t, St. Just                          | 36 17 9  | —        | —             | 1 1 6       | 0 1 6      | Nov. 1870  |  |  |
| 940                     | St. Ives Consols, t, St. Ives                   | 10 15 0  | 14       | 13 14         | 17 5 0      | 0 10 0     | June 1872  |  |  |
| 8771                    | St. Just Amalgamated, t*                        | 3 10 0   | —        | —             | 0 10 0      | 0 10 0     | Nov. 1871  |  |  |
| 12000                   | Tanars, t, c, Pool, Illogan*                    | 6 0 0    | —        | —             | 0 9 0       | 0 4 0      | Nov. 1871  |  |  |
| 25000                   | Terras, t, c, Pool, Illogan*                    | 1 0 0    | —        | —             | 2 16 0      | 0 4 0      | July 1872  |  |  |
| 4000                    | Tincoff, t, St. Austell                         | 1 0 0    | —        | —             | 0 3 0       | 0 1 6      | Oct. 1872  |  |  |
| 4000                    | Trumpet Consols, t, Helston                     | 9 0 0    | —        | —             | 40 18 6     | 2 0 0      | Sept. 1872 |  |  |
| 15000                   | Van, t, Llanidloes*                             | 5 15 0   | 16       | 14 15         | 9 1 0       | 0 10 0     | July 1872  |  |  |
| 3000                    | W. Chiverton, t, Perranzabuloe                  | 10 0 0   | —        | —             | 8 0 0       | 0 14 0     | Oct. 1872  |  |  |
| 2048                    | West Wheal Frances, t, Illogan                  | 26 13 9  | —        | —             | 61 7 6      | 0 10 0     | Sept. 1872 |  |  |
| 400                     | West Wheal Seton, c, Camborne                   | 47 0 0   | 75       | 65 70         | 3 7 6       | 0 2 6      | Sept. 1872 |  |  |
| 12288                   | Wheal Arthur, t, c, Calstock                    | 1 0 0    | —        | —             | 0 3 0       | 2 0 0      | Aug. 1872  |  |  |
| 512                     | Wheal Basset, c, Illogan*                       | 5 2 6    | 50       | 40 45         | 638 10 0    | 1 0 0      | Aug. 1872  |  |  |
| 5172                    | Wheal Grenville, c, Camborne*                   | 7 14 6   | 10       | 9 9 1/2       | 0 11 0      | 0 2 6      | July 1872  |  |  |
| 2485                    | Wheal Jane, t, St. Agnes                        | 2 13 10  | 9        | 8 9           | 10 0 0      | 0 7 6      | July 1872  |  |  |
| 1024                    | Wheal Kitty, t, Uny Lelant                      | 5 4 6    | 15       | 14 15         | 8 18 0      | 0 10 0     | Aug. 1872  |  |  |
| 896                     | Wheal Margaret, t, Uny Lelant                   | 13 17 0  | —        | —             | 14 2 6      | 0 5 0      | Jan. 1872  |  |  |
| 1024                    | Wheal Mary Ann, t, Menheniot                    | 10 0 0   | 11       | 12 12 1/2     | 82 2 3      | 0 10 0     | May 1872   |  |  |
| 1000                    | W. Mary Hutcheson, t, Plympton                  | 2 12 6   | —        | —             | 78 15 0     | 0 5 0      | Sept. 1872 |  |  |
| 80                      | Wheal Owles, t, St. Just                        | 70 0 0   | 400      | 300 400       | 2 1 6       | 0 4 0      | May 1872   |  |  |
| 12000                   | Wheal Russell, c, Tavistock                     | 1 0 0    | —        | —             | 522 10 0    | 4 0 0      | Aug. 1872  |  |  |
| 4096                    | Wheal Tavy, t, c, Redruth                       | 10 14 8  | —        | —             | 0 2 0       | 0 1 0      | June 1872  |  |  |
| 10000                   | Wheal Whisper, t, c, Warleggan*                 | 1 0 0    | —        | —             | 0 10 0      | 0 1 0      | June 1872  |  |  |
| 21600                   | Wicklow, c, s, t, Wicklow                       | 2 10 0   | —        | —             | 0 1 0       | 0 1 0      | Aug. 1872  |  |  |

## FOREIGN DIVIDEND MINES.

| Shares. | Mines.                                | Paid.  | Last Pr. | Clos. Pr. | Total divs. | Per share. | Last paid  |  |  |
|---------|---------------------------------------|--------|----------|-----------|-------------|------------|------------|--|--|
| 55000   | Alamillos, t, Spain*                  | 2 0 0  | —        | —         | 0 18 6      | 0 1 6      | Sept. 1872 |  |  |
| 30000   | Almada and Tinto Consol, s*           | 1 0 0  | —        | —         | 0 2 0       | 0 6 0      | Dec. 1871  |  |  |
| 20000   | Australian, c, South Australia*       | 7 7 6  | —        | —         | 0 2 6       | 0 1 0      | Sept. 1871 |  |  |
| 15000   | Birdseye Creek, c, California*        | 4 0 0  | —        | —         | 0 5 0       | 0 2 0      | July 1872  |  |  |
| 6000    | Bensberg, t, Germany*                 | 10 0 0 | —        | —         | 0 5 0       | 0 2 0      | July 1872  |  |  |
| 20000   | Cape Copper Mining, s, So. Africa*    | 7 0 0  | 26       | 25 26     | 9 3 4       | 0 3 4      | Sept. 1872 |  |  |
| 30000   | Central American Association*         | 0 15 0 | —        | —         | 0 6 0       | 0 1 0      | Sept. 1872 |  |  |
| 21000   | Colorado Terr. Consol, t, Colorado*   | 5 0 0  | —        | —         | 0 8 0       | 0 2 0      | July 1872  |  |  |
| 76162   | Don Pedro North, t, Colorado*         | 0 14 0 | —        | —         | 0 8 0       | 0 2 0      | Mar. 1871  |  |  |
| 23600   | Eberhardt and Aurora, c, Nevada*      | 10 0 0 | —        | —         | 2 5 0       | 0 2 0      | Mar. 1871  |  |  |
| 50000   | Emma, t, s, Utah (25,000 fully pd.)   | 20 0 0 | —        | —         | 1 0 0       | 0 1 0      | Oct. 1872  |  |  |
| 70000   | Emmah, t, s, Utah (25,000 fully pd.)  | 20 0 0 | —        | —         | 3 6 0       | 0 6 0      | Oct. 1872  |  |  |
| 15000   | Ferguson, c, California*              | 2 0 0  | —        | —         | 2 4 0       | 0 2 6      | Aug. 1872  |  |  |
| 30000   | Flagstaff, t, Utah*                   | 10 0 0 | —        | —         | 0 3 0       | 0 3 0      | April 1872 |  |  |
| 25000   | Fortuna, t, Spain*                    | 2 0 0  | —        | —         | 1 12 0      | 0 4 0      | Sept. 1872 |  |  |
| 50000   | Gold Run, t, California*              | 1 0 0  | —        | —         | 2 10 0      | 0 5 0      | Sept. 1872 |  |  |
| 68000   | Kapunda Mining Co. Australia*         | 1 3 0  | —        | —         | 0 1 0       | 0 1 0      | Aug. 1872  |  |  |
| 15000   | Llanes, t, Spain*                     | 3 0 0  | —        | —         | 0 1 0       | 0 1 0      | Aug. 1872  |  |  |
| 7297    | Lusitana, Portugal* (65 shares)       | 10 0 0 | —        | —         | 14 3 4      | 0 5 0      | Sept. 1872 |  |  |
| 30000   | Mineral Hill, s, Nev. (2100 shares)   | 10 0 0 | —        | —         | 1 10 0      | 0 10 0     | April 1872 |  |  |
| 12000   | Preussische Berg- u. Hütten Aktien, c | 30 0 0 | —        | —         | 0 6 0       | 0 3 0      | Mar. 1872  |  |  |
| 10000   | Pontgibaud, s, France*                | 20 0 0 | —        | —         | 3 0 0       | 1 4 0      | Sept. 1872 |  |  |
| 100000  | Port Phillip, c, Clunes*              | 1 0 0  | —        | —         | 11 15 0     | 0 15 0     | June 1872  |  |  |
| 44000   | Richmond Consols, c, Nevada*          | 5 0 0  | —        | —         | 1 7 0       | 0 1 0      | June 1871  |  |  |
| 12000   | Scottish Australian Mining Co. s*     | 1 0 0  | —        | —         | 0 4 0       | 0 4 0      | April 1872 |  |  |
| 12500   | Sierra Buttes, c, California*         | 2 0 0  | —        | —         | 0 12 0      | 0 2 0      | Sept. 1872 |  |  |
| 60000   | South Australia, c, Nevada*           | 5 0 0  | —        | —         | 0 14 0      | 0 2 0      | June 1872  |  |  |
| 15000   | Sweetland Creek, c, California*       | 4 0 0  | —        | —         | 0 2 6       | 0 2 6      | Mar. 1872  |  |  |
| 20000   | Tolima, s, t, s, Prussia*             | 2 0 0  | —        | —         | 8 0 0       | 3 0 0      | May 1872   |  |  |

## NON-DIVIDEND FOREIGN MINES.

| Shares. | Mines.  | Paid.   | Last Pr. | Clos. Pr. | Last Call. |       |
|---------|---|---------|----------|-----------|------------|-------|
| 50000   | Anglo-Argentine, <i>s</i> , <i>s</i> , Argentine Republic*                  | 1 0 0   | —        | —         | —          | 2     |
| 20000   | Anglo-Australian, <i>c</i> , Victoria*                                      | 2 8 0   | 1        | 1         | —          | 50    |
| 100000  | Anglo-Brazilian, <i>g</i> †   | 0 19 0  | —        | —         | —          | 120   |
| 20000   | Australian United, <i>c</i> , Victoria*                                     | 2 10 0  | 3½       | 3½        | —          | 120   |
| 3000    | Bellavista, <i>s</i> , Peru* (£10 shares)                                   | 6 10 0  | —        | —         | —          | 80    |
| 50000   | Braganza, <i>c</i> , Brazil†  | 0 16 0  | —        | —         | —          | 120   |
| 12000   | Camp Floyd, <i>s</i> , Utah*  | 10 0 0  | —        | —         | —          | 80    |
| 40000   | Cedar Creek, <i>c</i> , California* (£5 shares)                             | 10 0 0  | —        | —         | —          | 120   |
| 25000   | Cesena Sulphur Company, Romanga, Italy*                                     | 10 0 0  | 13½      | 12½       | —          | 80    |
| 7500    | Champion, <i>c</i> , <i>s</i> , Colorado*                                   | 10 0 0  | —        | —         | —          | 120   |
| 50000   | Chontales, <i>c</i> , <i>s</i> , Nicaragua*† (and 15,000 of £1 <i>ls.</i> ) | 2 0 0   | —        | —         | —          | 120   |
| 6000    | Clifton, <i>s</i> , Colorado*   | 5 0 0   | —        | —         | —          | 2     |
| 10000   | Crescent, <i>c</i> , Plumas County, California*                             | 3 0 0   | —        | —         | —          | 120   |
| 100000  | Culaba, <i>g</i> , Minas Geraes, Brazil*                                    | 1 0 0   | —        | —         | —          | 2     |
| 7500    | East Sheboygan Preference* (40,000 ordinary shares)                         | 0 17 6  | —        | —         | —          | 120   |
| 100000  | Eclipse, <i>c</i> , California*   | 2 0 0   | —        | —         | —          | 120   |
| 35000   | Excelsior Hydraulic Gold Washing Co., California*                           | 1 0 0   | —        | —         | —          | 150   |
| 60000   | Exchequer, <i>g</i> , <i>s</i> , California*                                | 1 0 0   | —        | —         | —          | 120   |
| 40000   | Fortuna Copper Mining Co. of Western Australia                              | 2 0 0   | —        | —         | —          | 120   |
| 50000   | Frontino and Bolivia, <i>g</i> , New Granada†                               | 2 0 0   | —        | —         | —          | 600   |
| 50000   | General Brazilian, <i>g</i> †   | 2 0 0   | —        | —         | —          | 120   |
| 12000   | Hamilton Smelting Company, Nevada*  | 1 0 0   | —        | —         | —          | 120   |
| 40000   | Holcomb Valley, <i>g</i> , <i>c</i> , California                            | 1 0 6   | —        | —         | —          | 120   |
| 20000   | Imperial Brazilian Collieries, Brazil*                                      | 1 0 0   | —        | —         | —          | 120   |
| 20000   | L. X. L., <i>g</i> , <i>s</i> , California*                                 | 5 0 0   | —        | —         | —          | 200   |
| 50000   | Javali, <i>g</i> , Nicaragua*   | 5 0 0   | —        | —         | —          | 200   |
| 11000   | Kansas, <i>c</i> , Colorado*  | 5 0 0   | —        | —         | —          | 120   |
| 12000   | Langston, <i>c</i> , <i>s</i> , Viscaya, Spain (£2 shares)                  | 1 0 0   | —        | —         | —          | 1800  |
| 20000   | Last Chance, <i>s</i> , <i>s</i> , Utah                                     | 1 5 0   | —        | —         | —          | 1000  |
| 150000  | London and California, <i>g</i> †   | 5 0 0   | —        | —         | —          | 800   |
| 4000    | Malaga, <i>t</i> , Spain*   | 2 0 0   | —        | —         | —          | 380   |
| 30000   | Malpaso, <i>c</i> , Colombia*   | 10 0 0  | —        | —         | —          | 1200  |
| 5000    | Mammoth Copperopolis of Utah, <i>c</i> , <i>s</i> , Utah*                   | 1 0 0   | —        | —         | —          | 1500  |
| 12000   | Menzenberg, <i>c</i> , Honnef, Germany*                                     | 10 0 0  | —        | —         | —          | 1000  |
| 14000   | Montague & Waverley Gold Quartz Crushing Co., N. Scot.                      | 5 0 0   | —        | —         | —          | 600   |
| 51000   | Monte Leon, <i>c</i> , <i>s</i> , Italy*                                    | 5 0 0   | —        | —         | —          | 1200  |
| 50000   | New Quebrada, <i>c</i> , Venezuela*   | 5 0 0   | —        | —         | —          | 1200  |
| 50000   | New Rosario, <i>s</i> , Mexico*   | 5 0 0   | —        | —         | —          | 1200  |
| 20000   | New Zealand Kapanga, <i>g</i> , Coromandel*                                 | 0 15 0  | —        | —         | —          | 600   |
| 5000    | North American, <i>g</i> †  | 5 0 0   | —        | —         | —          | 1200  |
| 5000    | Pacific, <i>c</i> , <i>s</i> , Nevada and California (and reduced)*         | 4 0 0   | —        | —         | —          | 1200  |
| 20000   | Panulillo, <i>c</i> , Chili†  | 7 0 0   | —        | —         | —          | 1200  |
| 30000   | Pestaresa United, <i>g</i> , Italy*†  | 4 0 0   | —        | —         | —          | 2500  |
| 2000    | Pinto, <i>s</i> , Nevada (and 8000 deferred)                                | 3 0 0   | —        | —         | —          | 1200  |
| 30000   | Rio, <i>c</i> , Colombia*   | 5 0 0   | —        | —         | —          | 1200  |
| 20000   | Rosa Grande, <i>c</i> , Brazil† (£1 shares)                                 | 5 0 0   | —        | —         | —          | 1200  |
| 2500    | Ruby Consolidated, <i>s</i> , Nevada*                                       | 0 17 0  | —        | —         | —          | 6000  |
| 50000   | Russia, <i>c</i> , Orenburg, <i>s</i> , Uta*                                | 10 0 0  | —        | —         | —          | 12000 |
| 5000    | San Pedro, <i>c</i> , Chili*  | 10 0 0  | —        | —         | —          | 3000  |
| 5000    | Saturn, <i>s</i> , Utah*  | 2 0 0   | —        | —         | —          | 487   |
| 5000    | Silver Star, <i>s</i> , Nevada*   | 5 0 0   | —        | —         | —          | 6000  |
| 5000    | Silver Plume, <i>s</i> , Colorado*  | 10 0 0  | —        | —         | —          | 6000  |
| 5000    | Standard, <i>c</i> , Colorado*  | 1 0 0   | —        | —         | —          | 6000  |
| 5000    | St. John del Rey, Brazil†   | 2 0 0   | —        | —         | —          | 6000  |
| 5000    | Tolyaba, <i>s</i> , Nevada*   | 17 10 0 | —        | —         | —          | 12000 |
| 5000    | Taguairil, <i>c</i> , Brazil†   | 2 0 0   | —        | —         | —          | 3000  |
| 5000    | Thornhill Reef, <i>c</i> , Australia*                                       | 1 0 0   | —        | —         | —          | 1871  |
| 5000    | Tuolumne, <i>c</i> , California*  | 1 0 0   | —        | —         | —          | 4000  |
| 474     | United Mexican, <i>s</i> , Mexico†  | 2 0 0   | —        | —         | —          | 3500  |
| 5000    | Utah, <i>g</i> , <i>s</i> , <i>t</i> , Utah*                                | 23 5 2  | —        | —         | —          | 3523  |
| 5000    | Yorke Peninsula, <i>c</i> , South Australia                                 | 10 0 0  | —        | —         | —          | 1000  |
| 5000    | Yodasamutana, <i>c</i> , South Australia†                                   | 1 0 0   | —        | —         | —          | 1000  |